

Pantheon Report

Generated at 2018-02-14 16:07:40 (UTC).

Data path: GCE Sydney Ethernet (*local*) → GCE Tokyo Ethernet (*remote*).

Repeated the test of 17 congestion control schemes 10 times.

Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.

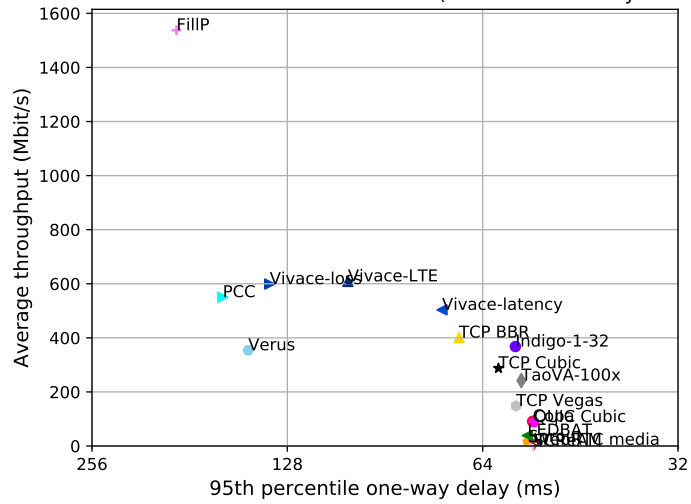
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo_fast**).

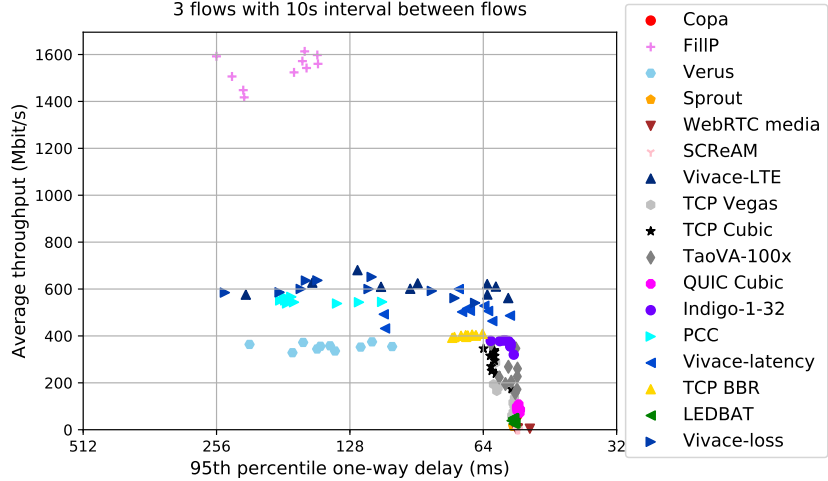
Git summary:

```
branch: master @ 2efdad57c2c56a9458b0d01ff33345e11732665
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

test from GCE Sydney Ethernet to GCE Tokyo Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



test from GCE Sydney Ethernet to GCE Tokyo Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows



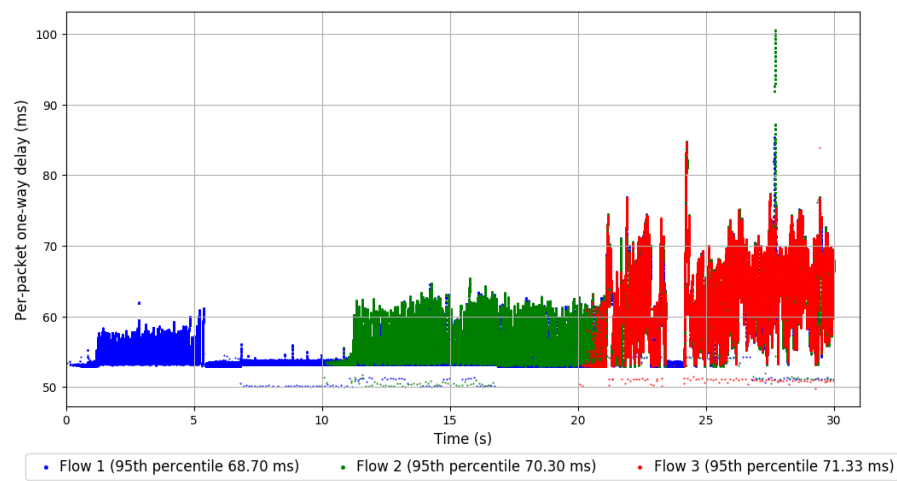
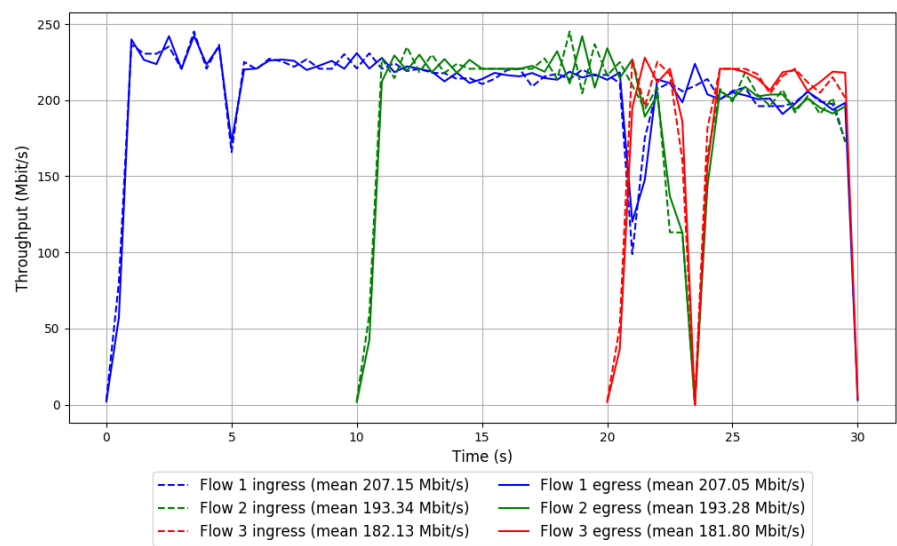
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	205.59	199.31	188.59	68.13	69.58	71.51	0.04	0.06	0.12
TCP Cubic	10	165.00	145.91	77.30	60.44	60.33	59.34	0.03	0.01	0.08
LEDBAT	10	23.77	17.93	9.40	54.63	54.58	54.59	0.02	0.06	0.00
PCC	10	491.55	61.71	54.17	161.09	160.36	131.89	1.04	0.90	1.46
QUIC Cubic	10	53.06	41.68	24.58	52.42	52.50	51.62	0.00	0.00	0.00
SCReAM	10	0.21	0.21	0.22	52.59	51.99	52.53	0.01	0.00	0.00
WebRTC media	10	2.28	1.46	0.64	52.96	52.94	53.17	0.00	0.00	0.05
Sprout	10	7.75	7.62	7.39	54.49	54.50	54.47	0.03	0.05	0.00
TaoVA-100x	10	153.21	79.72	167.13	55.56	55.07	55.98	0.01	0.01	0.02
TCP Vegas	10	60.97	93.08	75.71	55.88	56.75	55.74	0.01	0.02	0.00
Verus	10	203.39	166.47	122.81	130.82	163.24	158.62	0.39	1.89	1.64
Copa	10	50.48	42.16	37.74	53.58	53.64	53.73	0.01	0.01	0.01
FillP	10	822.10	746.82	659.28	176.12	170.55	205.86	5.13	7.35	10.41
Indigo-1-32	10	194.88	186.35	152.46	56.20	57.39	57.72	0.01	0.01	0.02
Vivace-latency	10	284.33	261.29	138.30	78.08	85.26	55.33	0.06	0.13	0.01
Vivace-loss	10	347.96	276.35	204.93	129.36	128.96	97.69	0.69	0.85	0.50
Vivace-LTE	10	353.64	280.39	209.48	83.00	92.81	82.51	0.19	0.20	0.01

```
Run 1: Statistics of TCP BBR

Start at: 2018-02-14 08:28:51
End at: 2018-02-14 08:29:21

# Below is generated by plot.py at 2018-02-14 13:57:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 395.96 Mbit/s
95th percentile per-packet one-way delay: 69.929 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 207.05 Mbit/s
95th percentile per-packet one-way delay: 68.696 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 193.28 Mbit/s
95th percentile per-packet one-way delay: 70.295 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 181.80 Mbit/s
95th percentile per-packet one-way delay: 71.326 ms
Loss rate: 0.01%
```


Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-02-14 08:46:17

End at: 2018-02-14 08:46:47

Below is generated by plot.py at 2018-02-14 13:58:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 403.00 Mbit/s

95th percentile per-packet one-way delay: 66.482 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 210.58 Mbit/s

95th percentile per-packet one-way delay: 64.928 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 195.45 Mbit/s

95th percentile per-packet one-way delay: 66.353 ms

Loss rate: 0.11%

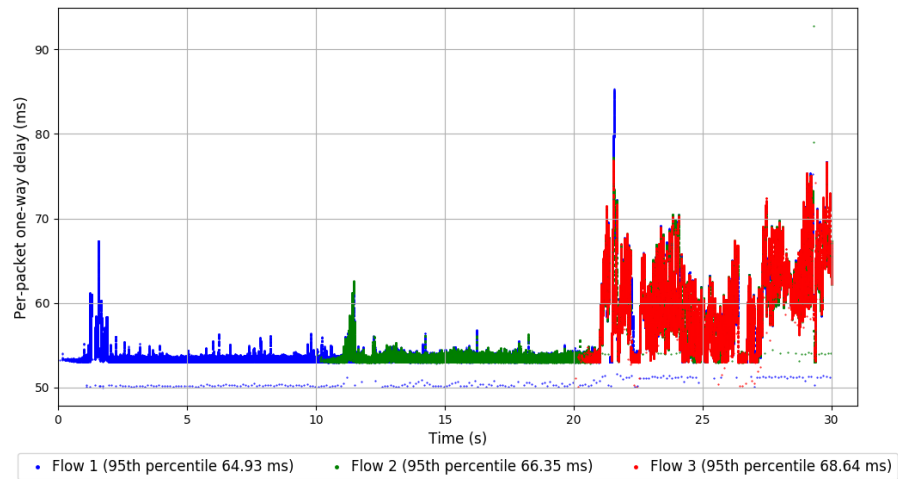
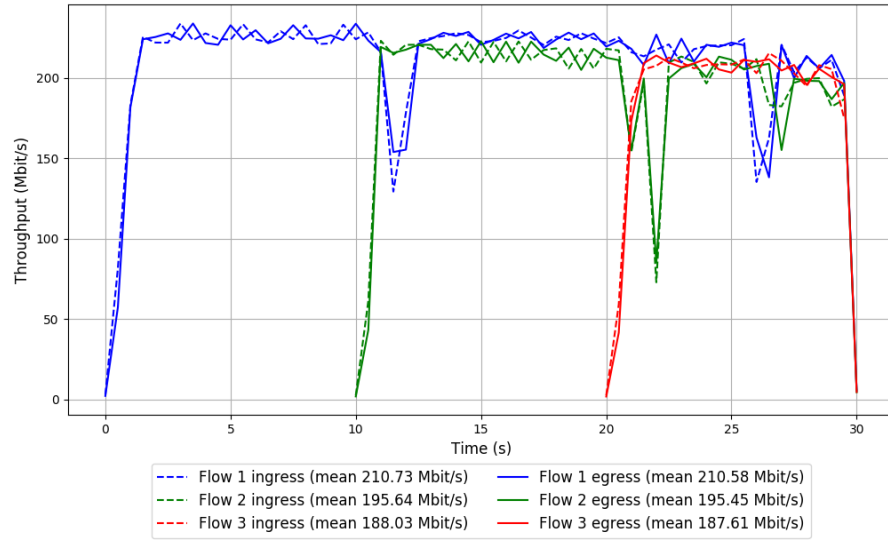
-- Flow 3:

Average throughput: 187.61 Mbit/s

95th percentile per-packet one-way delay: 68.636 ms

Loss rate: 0.16%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-02-14 09:03:40

End at: 2018-02-14 09:04:10

Below is generated by plot.py at 2018-02-14 13:58:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 400.73 Mbit/s

95th percentile per-packet one-way delay: 71.832 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 205.19 Mbit/s

95th percentile per-packet one-way delay: 70.100 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 202.18 Mbit/s

95th percentile per-packet one-way delay: 71.916 ms

Loss rate: 0.10%

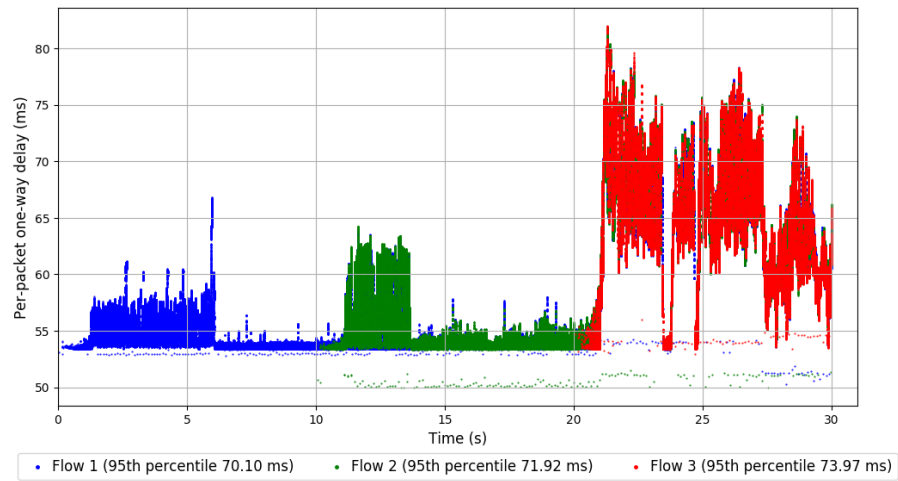
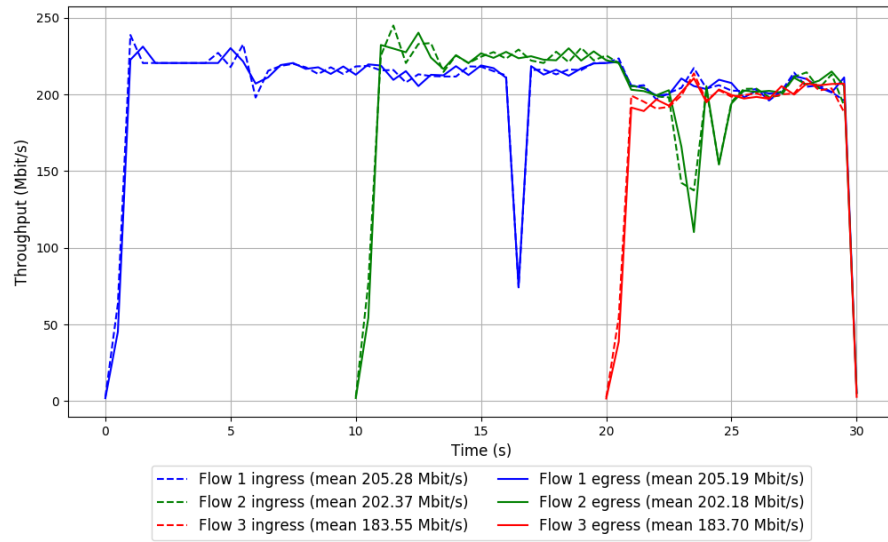
-- Flow 3:

Average throughput: 183.70 Mbit/s

95th percentile per-packet one-way delay: 73.967 ms

Loss rate: 0.01%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-02-14 09:21:12

End at: 2018-02-14 09:21:42

Below is generated by plot.py at 2018-02-14 13:58:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 401.45 Mbit/s

95th percentile per-packet one-way delay: 66.551 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 206.50 Mbit/s

95th percentile per-packet one-way delay: 64.757 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 195.35 Mbit/s

95th percentile per-packet one-way delay: 66.520 ms

Loss rate: 0.02%

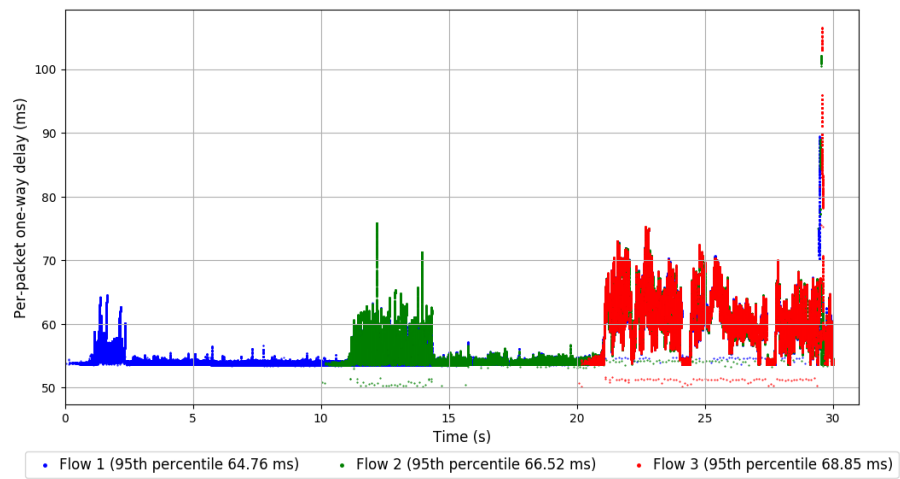
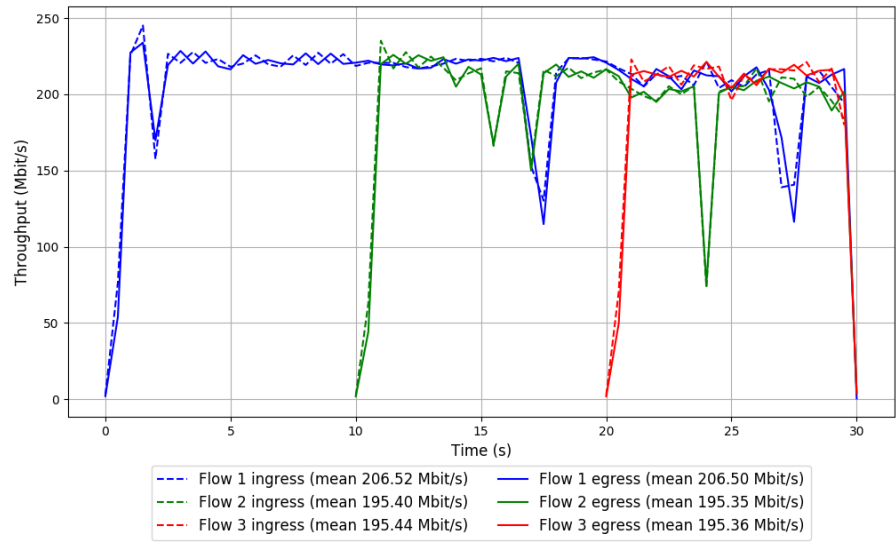
-- Flow 3:

Average throughput: 195.36 Mbit/s

95th percentile per-packet one-way delay: 68.849 ms

Loss rate: 0.04%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-02-14 09:38:54

End at: 2018-02-14 09:39:24

Below is generated by plot.py at 2018-02-14 13:58:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 395.40 Mbit/s

95th percentile per-packet one-way delay: 74.361 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 197.02 Mbit/s

95th percentile per-packet one-way delay: 72.658 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 204.94 Mbit/s

95th percentile per-packet one-way delay: 74.086 ms

Loss rate: 0.01%

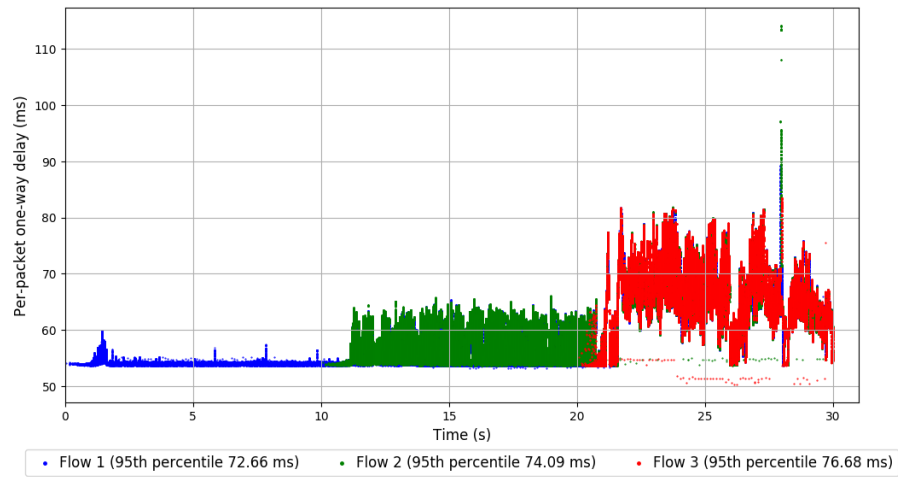
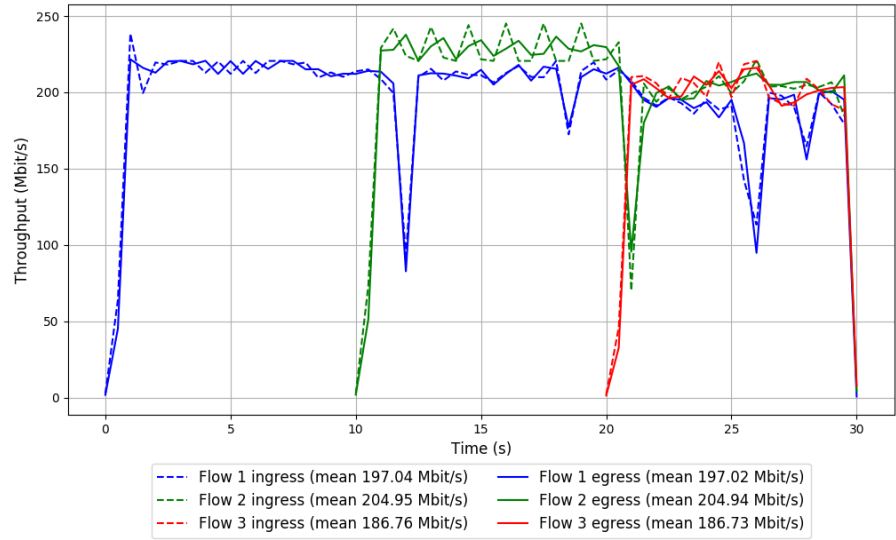
-- Flow 3:

Average throughput: 186.73 Mbit/s

95th percentile per-packet one-way delay: 76.684 ms

Loss rate: 0.02%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-02-14 09:56:17

End at: 2018-02-14 09:56:47

Below is generated by plot.py at 2018-02-14 13:58:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 392.02 Mbit/s

95th percentile per-packet one-way delay: 75.192 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 199.85 Mbit/s

95th percentile per-packet one-way delay: 74.182 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 194.38 Mbit/s

95th percentile per-packet one-way delay: 75.084 ms

Loss rate: 0.11%

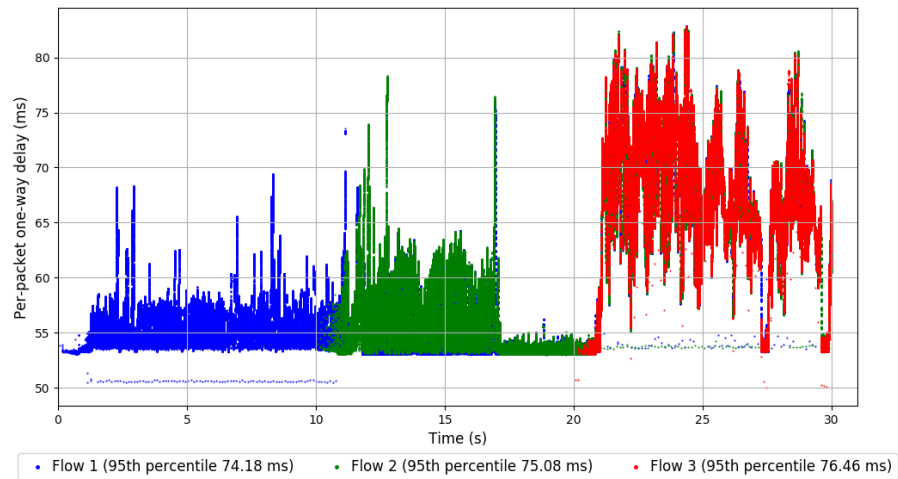
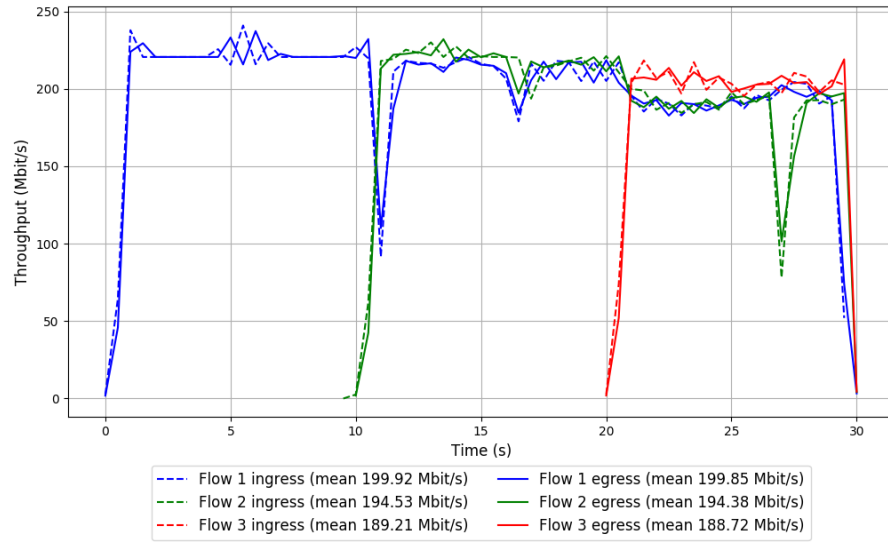
-- Flow 3:

Average throughput: 188.72 Mbit/s

95th percentile per-packet one-way delay: 76.463 ms

Loss rate: 0.25%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-02-14 10:14:04

End at: 2018-02-14 10:14:34

Below is generated by plot.py at 2018-02-14 13:58:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 409.07 Mbit/s

95th percentile per-packet one-way delay: 64.223 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 210.95 Mbit/s

95th percentile per-packet one-way delay: 62.314 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 203.34 Mbit/s

95th percentile per-packet one-way delay: 64.335 ms

Loss rate: 0.03%

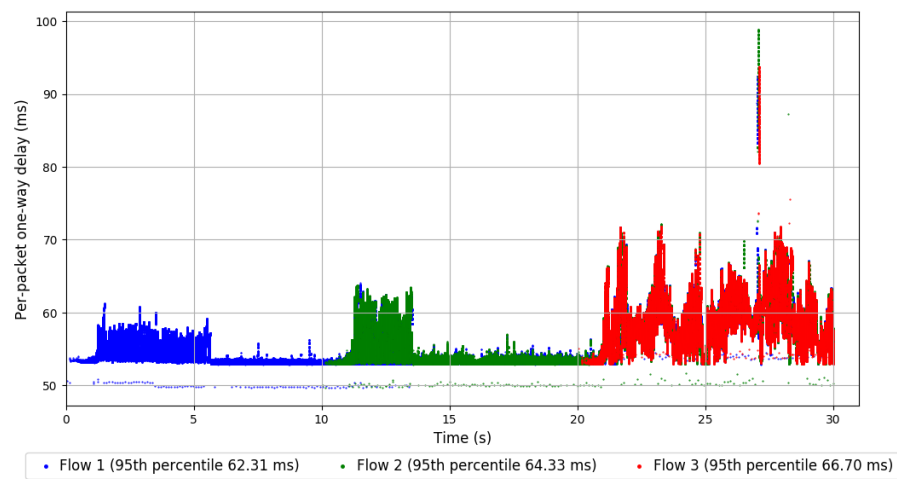
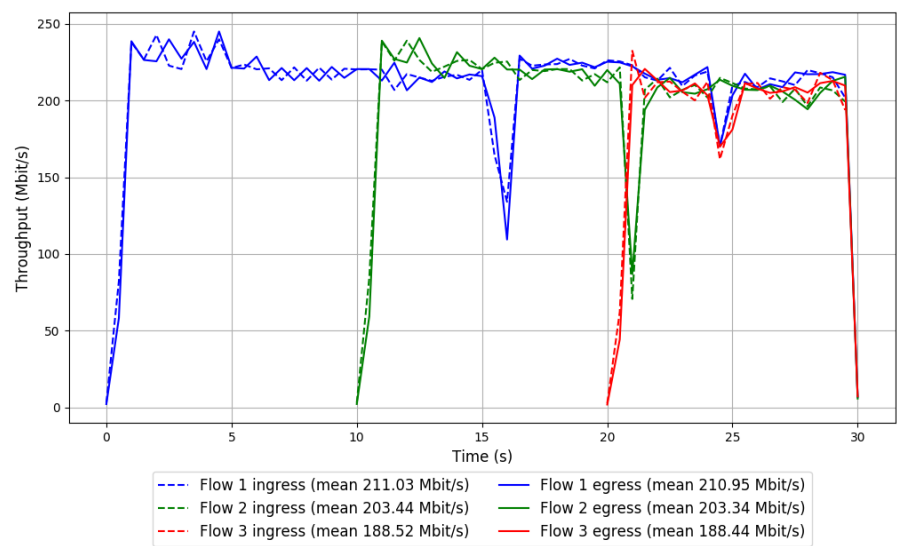
-- Flow 3:

Average throughput: 188.44 Mbit/s

95th percentile per-packet one-way delay: 66.699 ms

Loss rate: 0.09%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-02-14 10:31:39

End at: 2018-02-14 10:32:09

Below is generated by plot.py at 2018-02-14 13:58:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 403.36 Mbit/s

95th percentile per-packet one-way delay: 70.134 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 207.39 Mbit/s

95th percentile per-packet one-way delay: 68.966 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 204.95 Mbit/s

95th percentile per-packet one-way delay: 69.580 ms

Loss rate: 0.02%

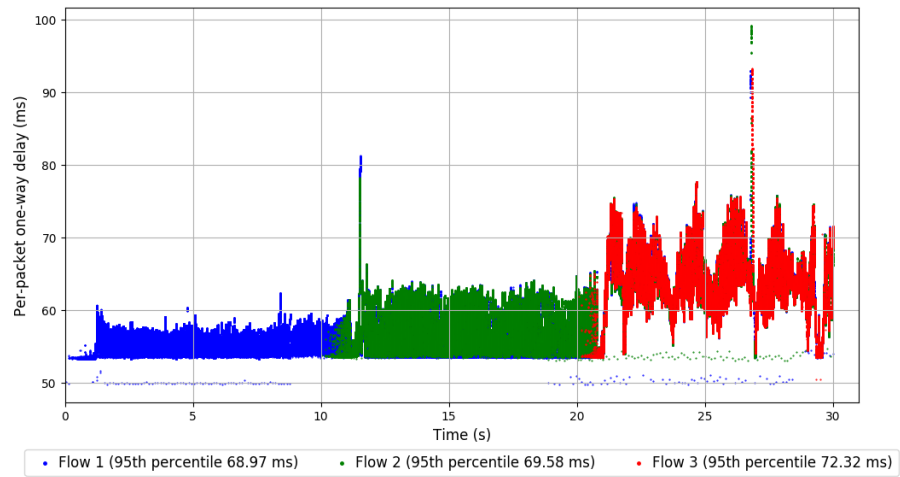
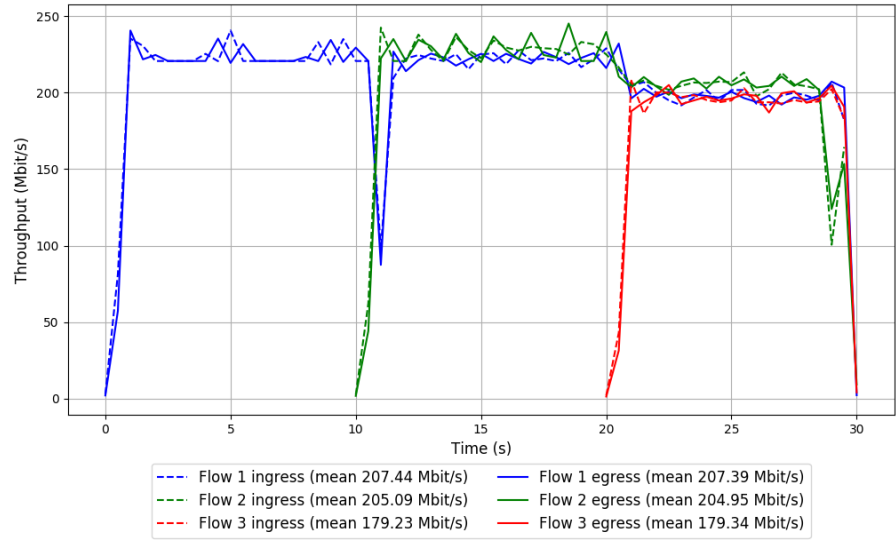
-- Flow 3:

Average throughput: 179.34 Mbit/s

95th percentile per-packet one-way delay: 72.318 ms

Loss rate: 0.09%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-02-14 10:49:09

End at: 2018-02-14 10:49:39

Below is generated by plot.py at 2018-02-14 14:04:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 405.69 Mbit/s

95th percentile per-packet one-way delay: 67.819 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 205.98 Mbit/s

95th percentile per-packet one-way delay: 67.083 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 197.71 Mbit/s

95th percentile per-packet one-way delay: 68.058 ms

Loss rate: 0.02%

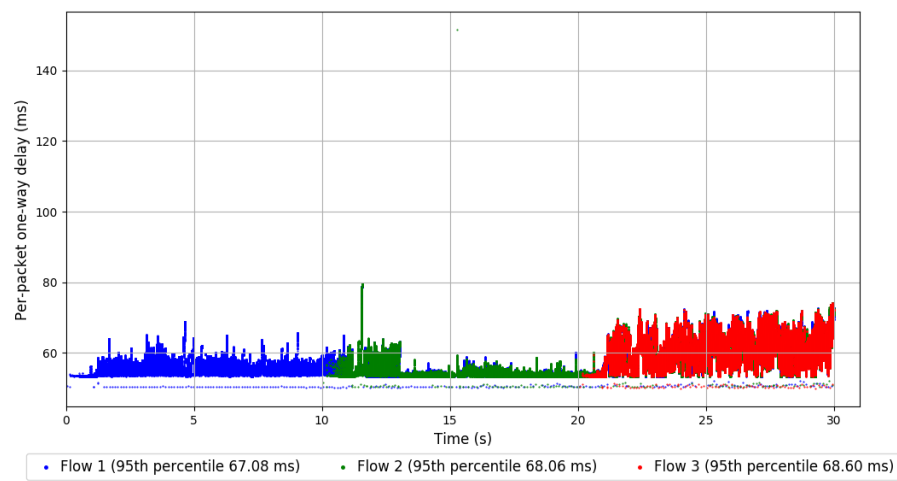
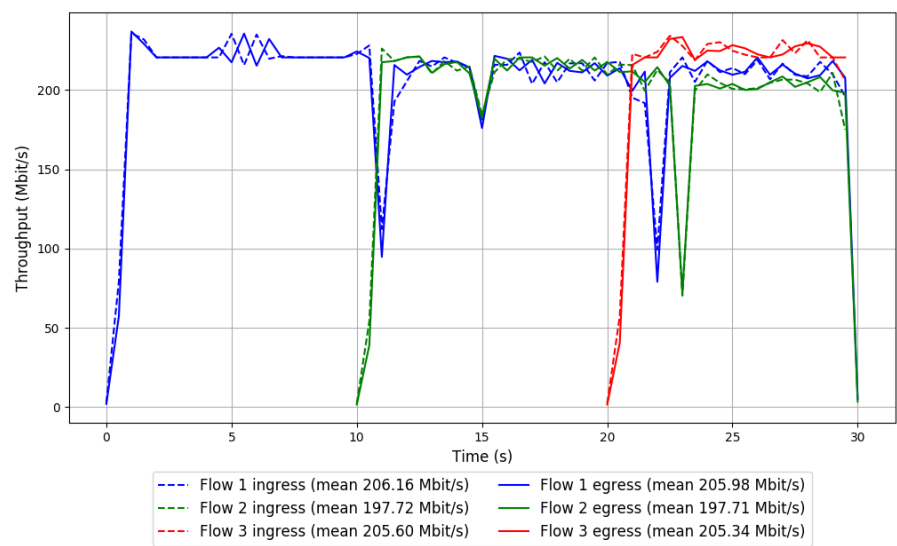
-- Flow 3:

Average throughput: 205.34 Mbit/s

95th percentile per-packet one-way delay: 68.601 ms

Loss rate: 0.25%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-02-14 11:06:47

End at: 2018-02-14 11:07:17

Below is generated by plot.py at 2018-02-14 14:04:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 402.24 Mbit/s

95th percentile per-packet one-way delay: 69.359 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 205.44 Mbit/s

95th percentile per-packet one-way delay: 67.622 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 201.47 Mbit/s

95th percentile per-packet one-way delay: 69.524 ms

Loss rate: 0.04%

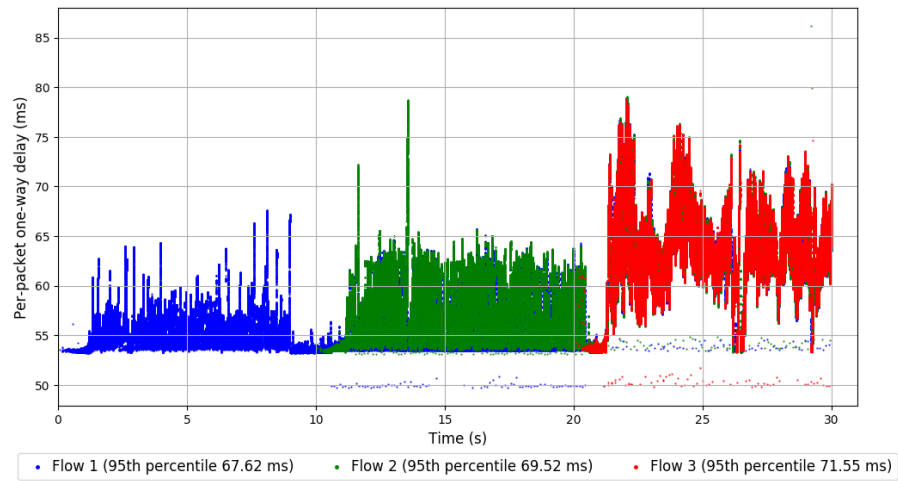
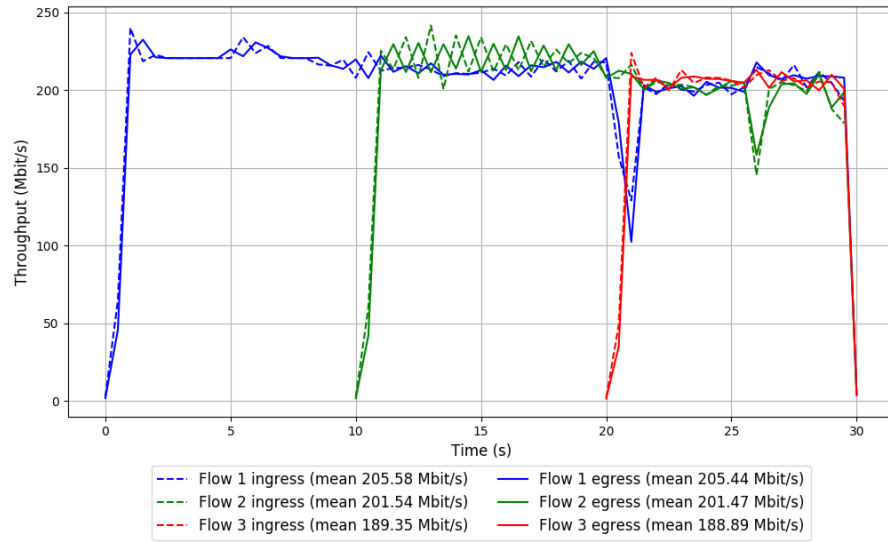
-- Flow 3:

Average throughput: 188.89 Mbit/s

95th percentile per-packet one-way delay: 71.554 ms

Loss rate: 0.25%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-02-14 08:44:05

End at: 2018-02-14 08:44:35

Below is generated by plot.py at 2018-02-14 14:04:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 315.45 Mbit/s

95th percentile per-packet one-way delay: 61.757 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 161.10 Mbit/s

95th percentile per-packet one-way delay: 61.211 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 181.68 Mbit/s

95th percentile per-packet one-way delay: 62.483 ms

Loss rate: 0.00%

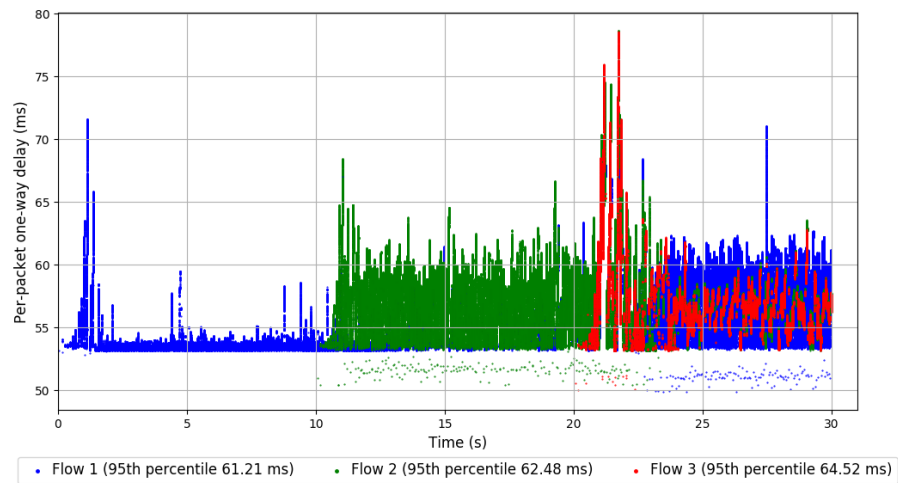
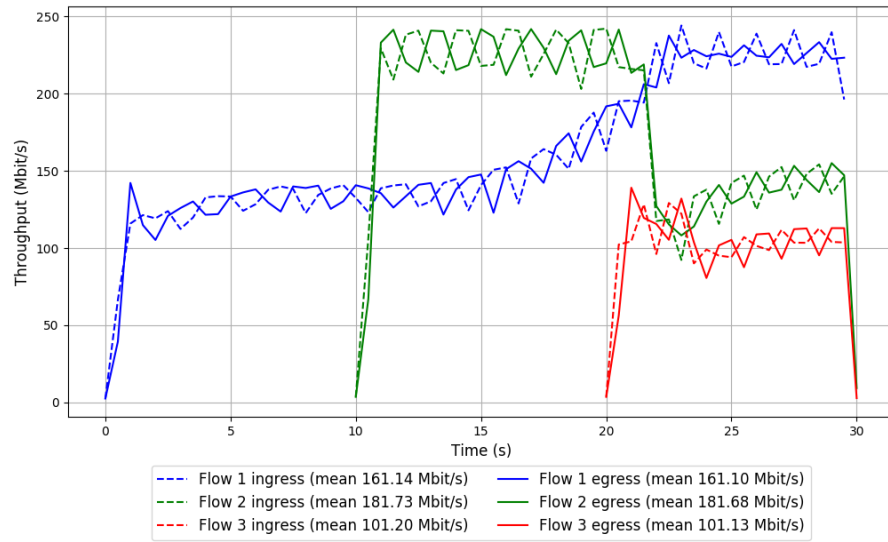
-- Flow 3:

Average throughput: 101.13 Mbit/s

95th percentile per-packet one-way delay: 64.523 ms

Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-02-14 09:01:25

End at: 2018-02-14 09:01:55

Below is generated by plot.py at 2018-02-14 14:04:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 314.74 Mbit/s

95th percentile per-packet one-way delay: 60.364 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 183.86 Mbit/s

95th percentile per-packet one-way delay: 60.895 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 115.08 Mbit/s

95th percentile per-packet one-way delay: 58.381 ms

Loss rate: 0.05%

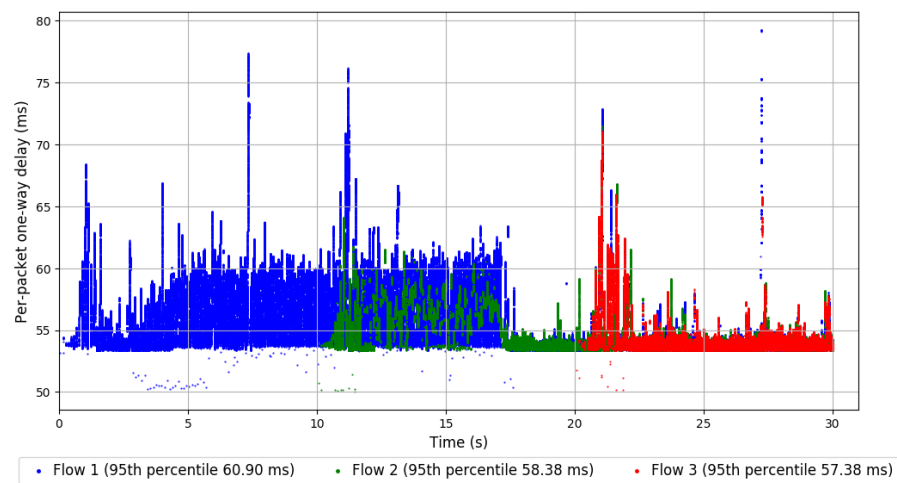
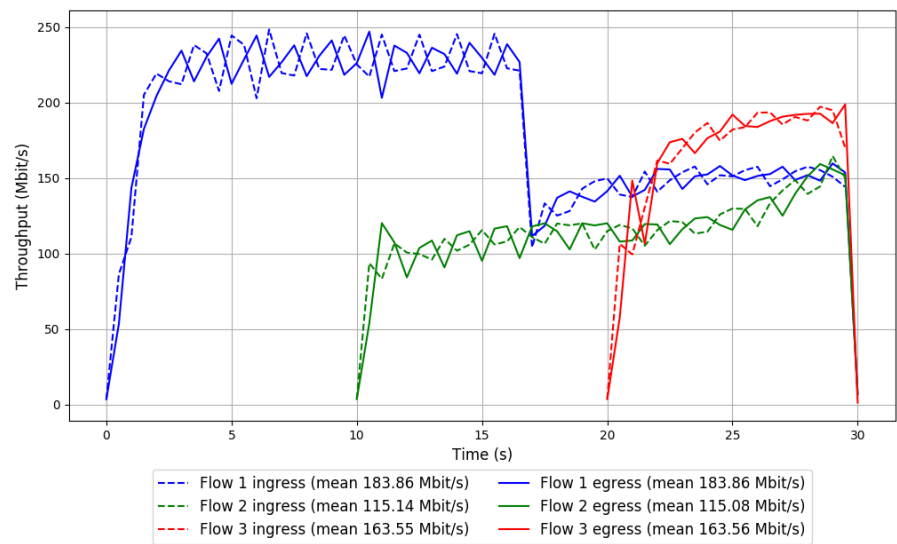
-- Flow 3:

Average throughput: 163.56 Mbit/s

95th percentile per-packet one-way delay: 57.381 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-02-14 09:19:00

End at: 2018-02-14 09:19:30

Below is generated by plot.py at 2018-02-14 14:04:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 251.09 Mbit/s

95th percentile per-packet one-way delay: 61.261 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 121.64 Mbit/s

95th percentile per-packet one-way delay: 60.748 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 191.92 Mbit/s

95th percentile per-packet one-way delay: 61.479 ms

Loss rate: 0.00%

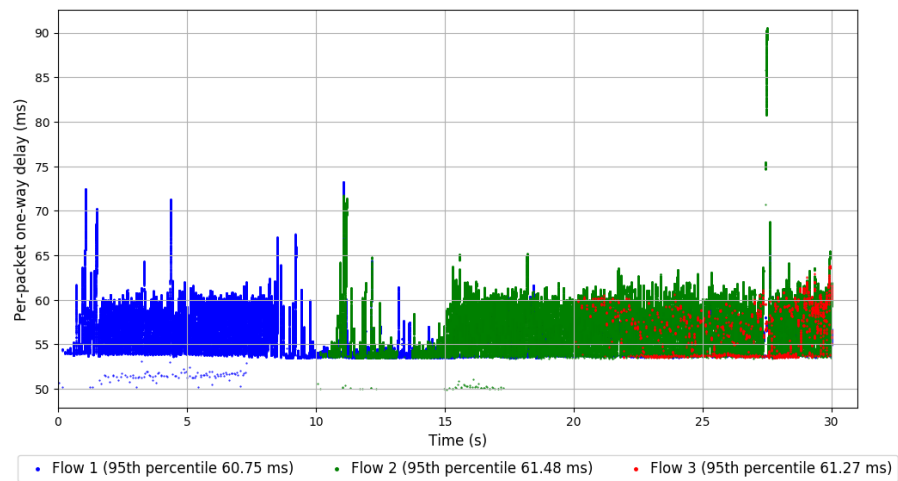
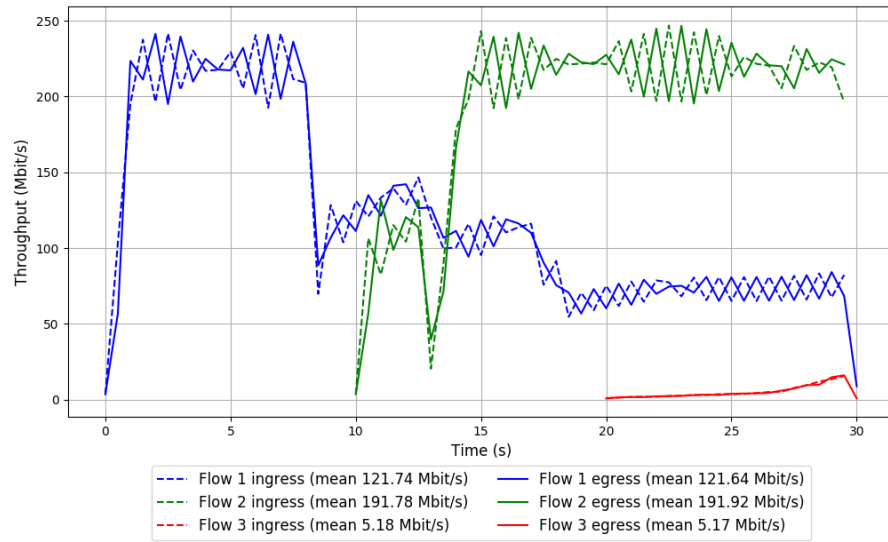
-- Flow 3:

Average throughput: 5.17 Mbit/s

95th percentile per-packet one-way delay: 61.274 ms

Loss rate: 0.16%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-02-14 09:36:41

End at: 2018-02-14 09:37:11

Below is generated by plot.py at 2018-02-14 14:04:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 173.94 Mbit/s

95th percentile per-packet one-way delay: 55.219 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 97.34 Mbit/s

95th percentile per-packet one-way delay: 55.226 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 112.60 Mbit/s

95th percentile per-packet one-way delay: 55.245 ms

Loss rate: 0.00%

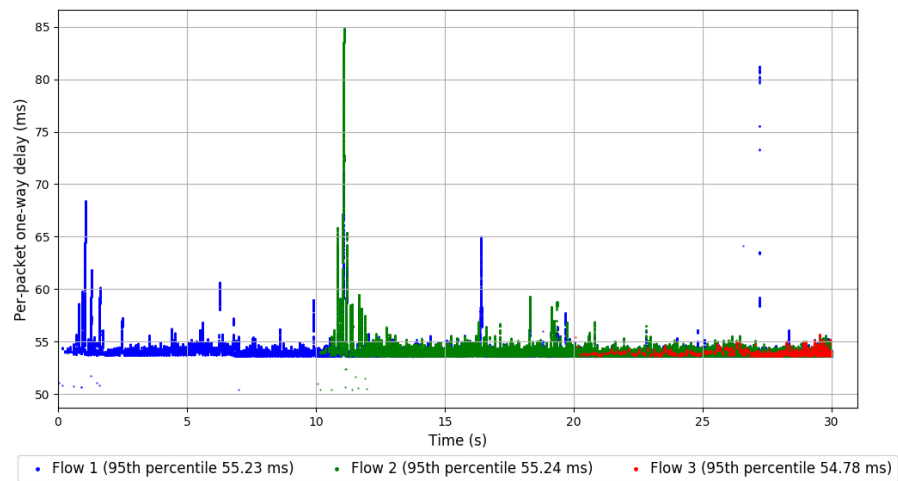
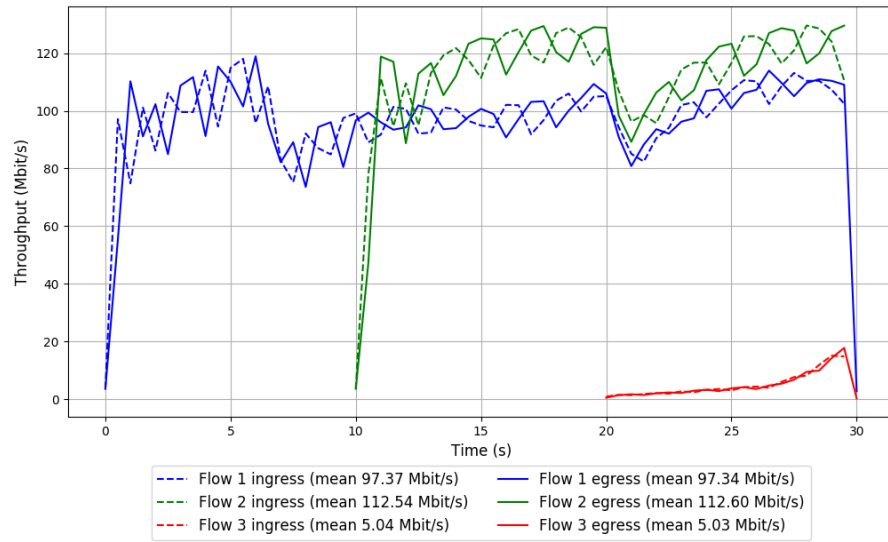
-- Flow 3:

Average throughput: 5.03 Mbit/s

95th percentile per-packet one-way delay: 54.782 ms

Loss rate: 0.14%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-02-14 09:53:57

End at: 2018-02-14 09:54:27

Below is generated by plot.py at 2018-02-14 14:04:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 345.95 Mbit/s

95th percentile per-packet one-way delay: 63.920 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 214.64 Mbit/s

95th percentile per-packet one-way delay: 65.295 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 133.42 Mbit/s

95th percentile per-packet one-way delay: 61.564 ms

Loss rate: 0.01%

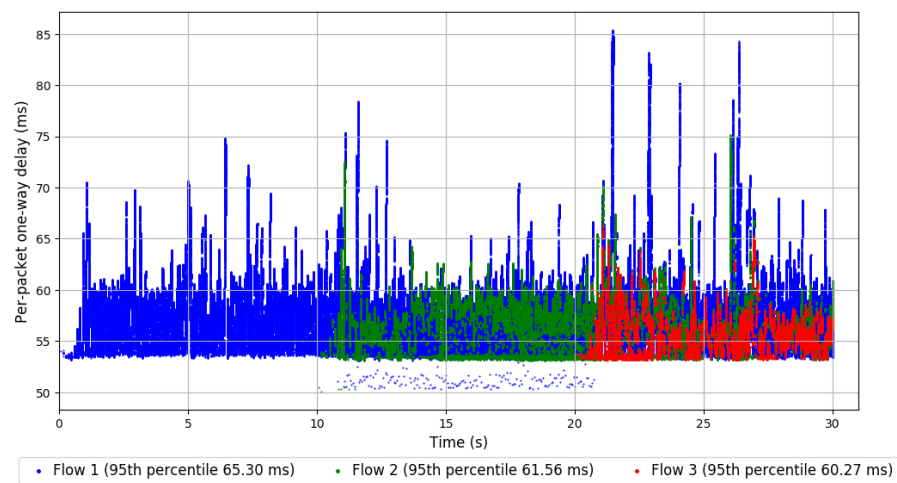
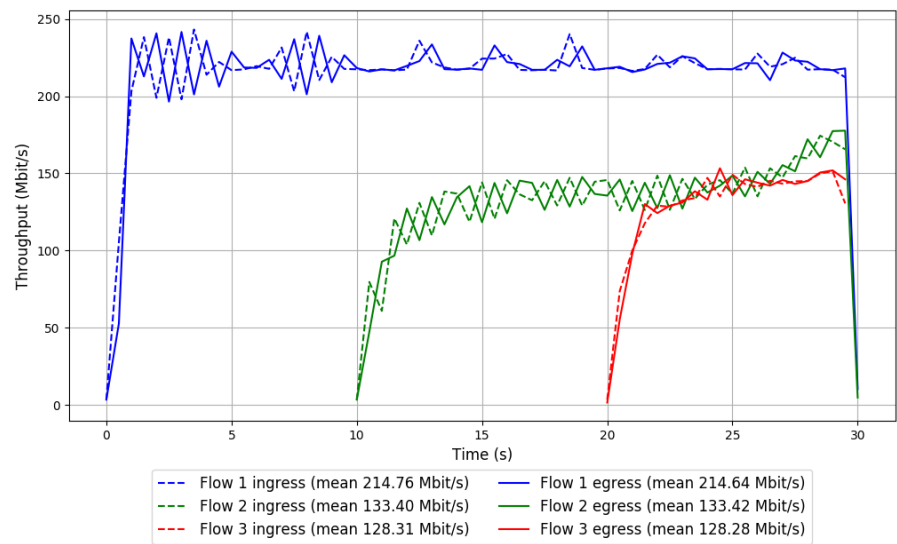
-- Flow 3:

Average throughput: 128.28 Mbit/s

95th percentile per-packet one-way delay: 60.273 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-02-14 10:11:47

End at: 2018-02-14 10:12:17

Below is generated by plot.py at 2018-02-14 14:04:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 338.87 Mbit/s

95th percentile per-packet one-way delay: 60.484 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 218.38 Mbit/s

95th percentile per-packet one-way delay: 60.715 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 179.01 Mbit/s

95th percentile per-packet one-way delay: 59.865 ms

Loss rate: 0.00%

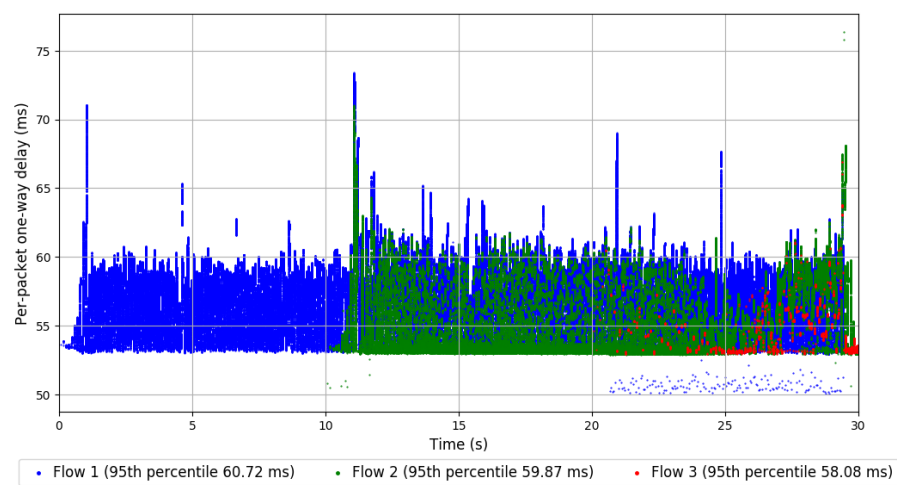
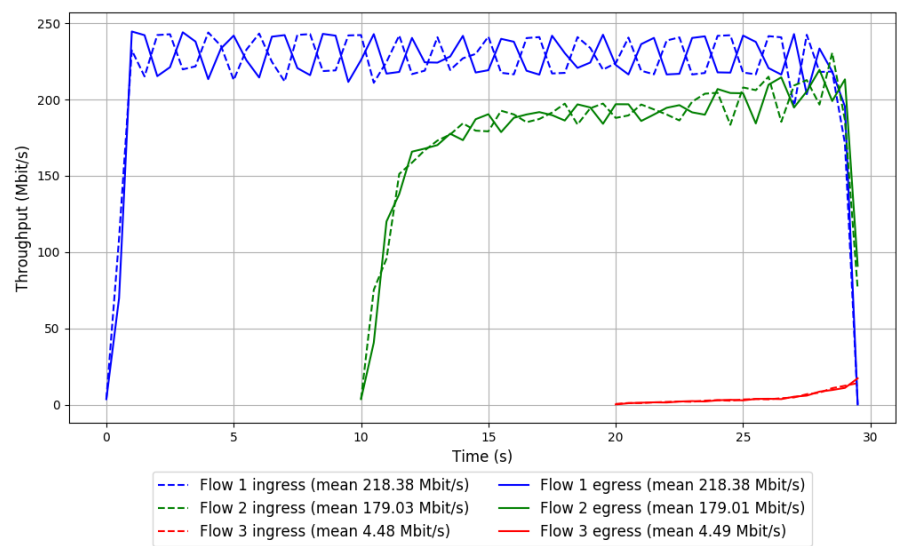
-- Flow 3:

Average throughput: 4.49 Mbit/s

95th percentile per-packet one-way delay: 58.082 ms

Loss rate: 0.27%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-02-14 10:29:23

End at: 2018-02-14 10:29:53

Below is generated by plot.py at 2018-02-14 14:06:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 294.57 Mbit/s

95th percentile per-packet one-way delay: 60.327 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 161.53 Mbit/s

95th percentile per-packet one-way delay: 58.401 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 142.00 Mbit/s

95th percentile per-packet one-way delay: 63.135 ms

Loss rate: 0.05%

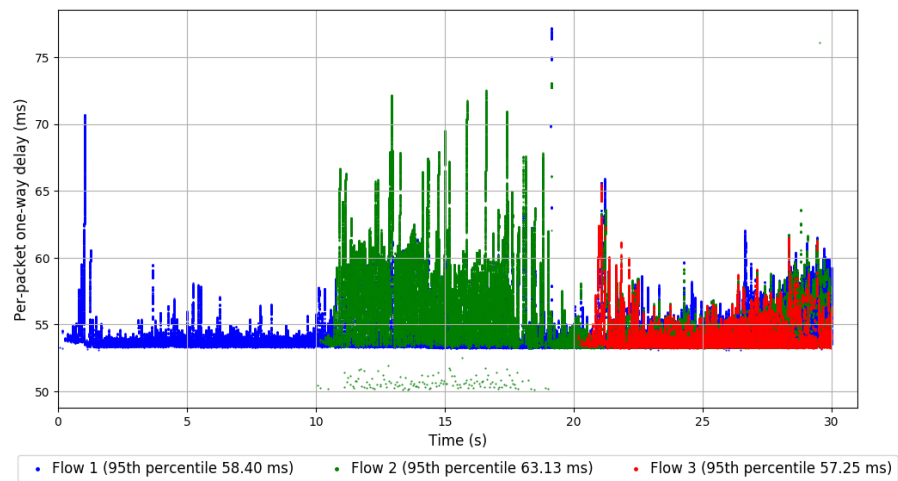
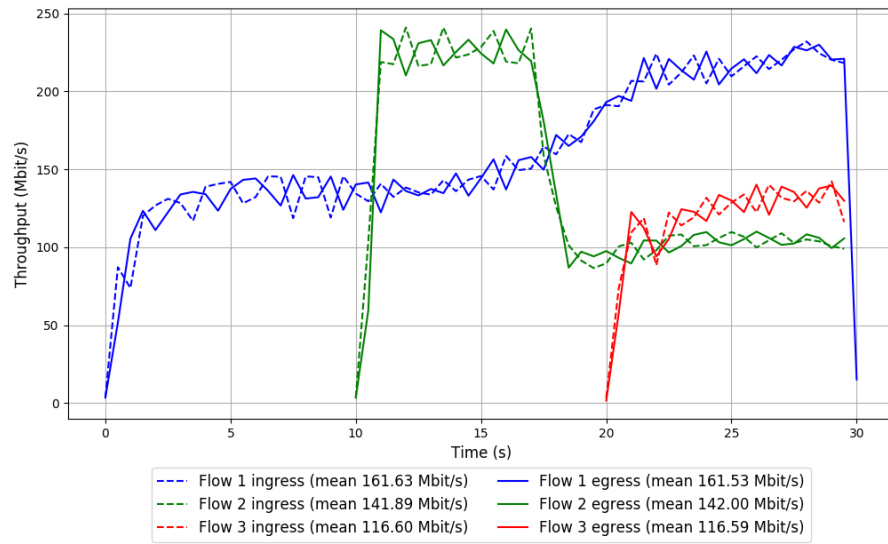
-- Flow 3:

Average throughput: 116.59 Mbit/s

95th percentile per-packet one-way delay: 57.247 ms

Loss rate: 0.00%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-02-14 10:46:58

End at: 2018-02-14 10:47:28

Below is generated by plot.py at 2018-02-14 14:06:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 239.26 Mbit/s

95th percentile per-packet one-way delay: 59.942 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 161.95 Mbit/s

95th percentile per-packet one-way delay: 60.124 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 114.10 Mbit/s

95th percentile per-packet one-way delay: 59.275 ms

Loss rate: 0.00%

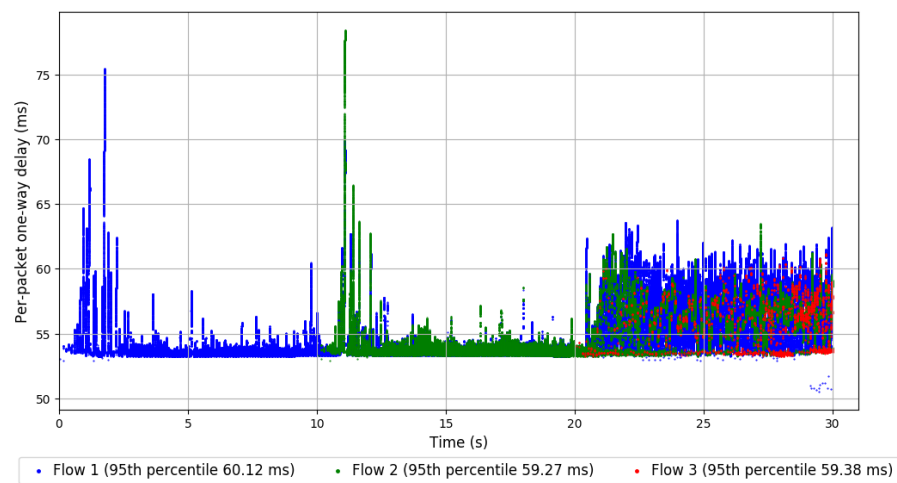
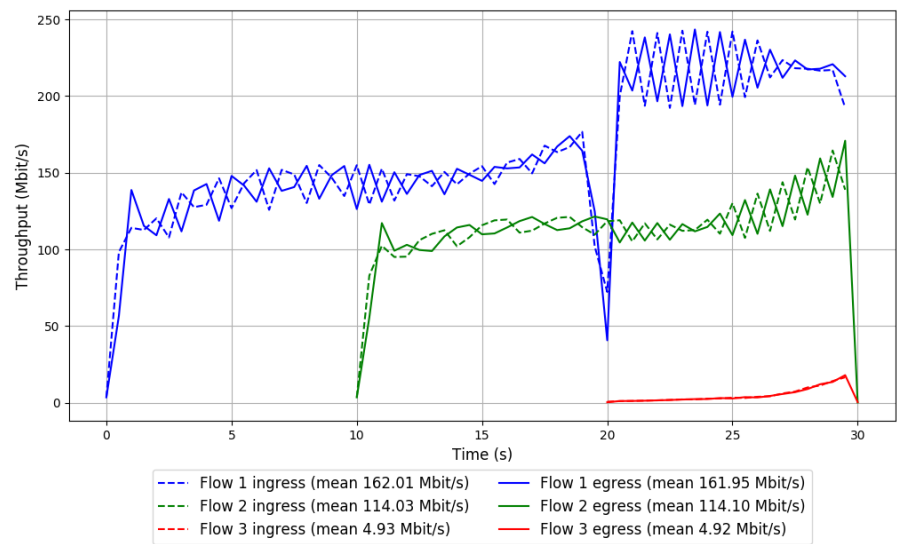
-- Flow 3:

Average throughput: 4.92 Mbit/s

95th percentile per-packet one-way delay: 59.382 ms

Loss rate: 0.17%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-02-14 11:04:29

End at: 2018-02-14 11:04:59

Below is generated by plot.py at 2018-02-14 14:08:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 332.78 Mbit/s

95th percentile per-packet one-way delay: 60.416 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 201.84 Mbit/s

95th percentile per-packet one-way delay: 60.453 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 137.65 Mbit/s

95th percentile per-packet one-way delay: 59.374 ms

Loss rate: 0.00%

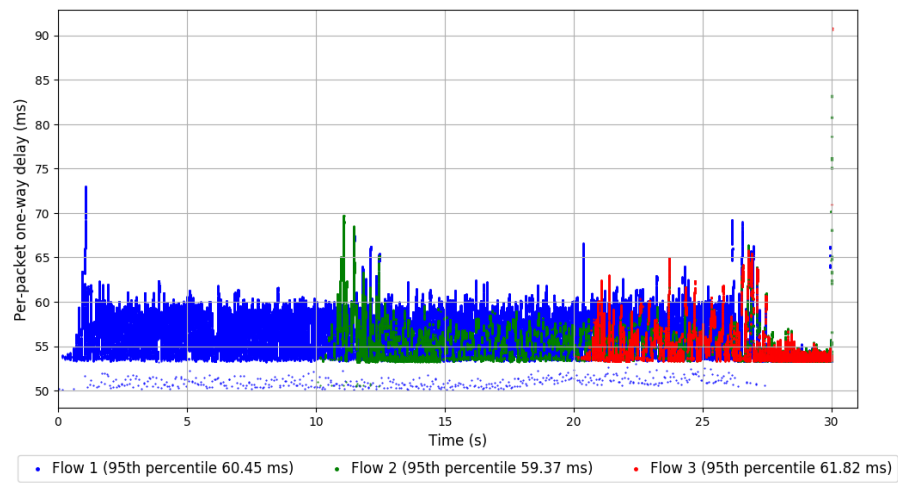
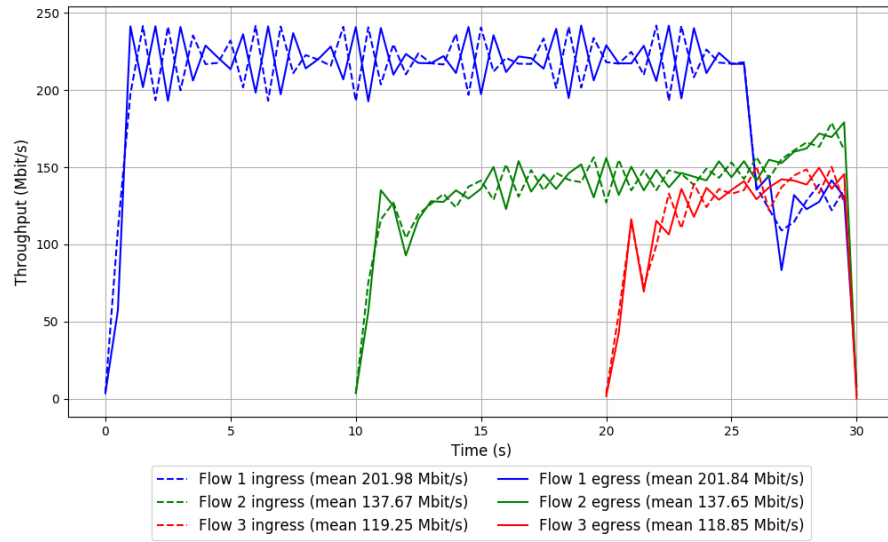
-- Flow 3:

Average throughput: 118.85 Mbit/s

95th percentile per-packet one-way delay: 61.819 ms

Loss rate: 0.09%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-02-14 11:21:58

End at: 2018-02-14 11:22:28

Below is generated by plot.py at 2018-02-14 14:08:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 270.20 Mbit/s

95th percentile per-packet one-way delay: 61.466 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 127.75 Mbit/s

95th percentile per-packet one-way delay: 61.310 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 151.67 Mbit/s

95th percentile per-packet one-way delay: 62.548 ms

Loss rate: 0.00%

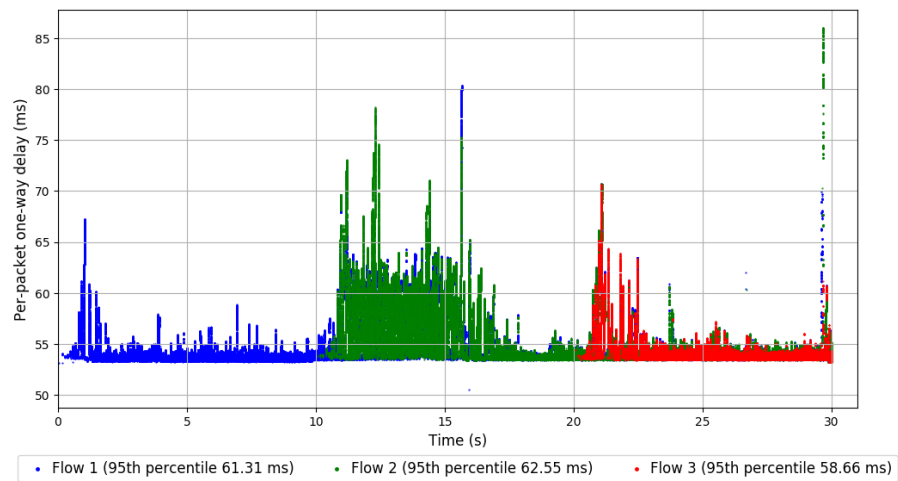
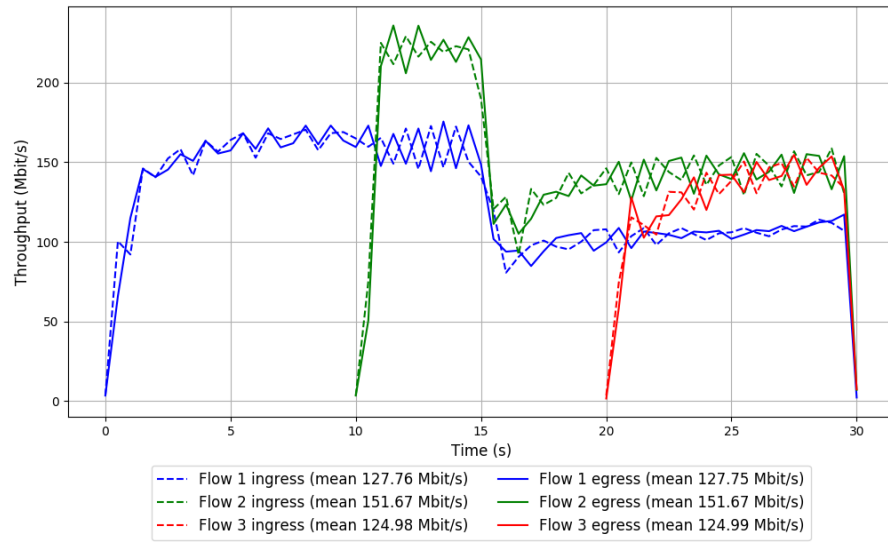
-- Flow 3:

Average throughput: 124.99 Mbit/s

95th percentile per-packet one-way delay: 58.659 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

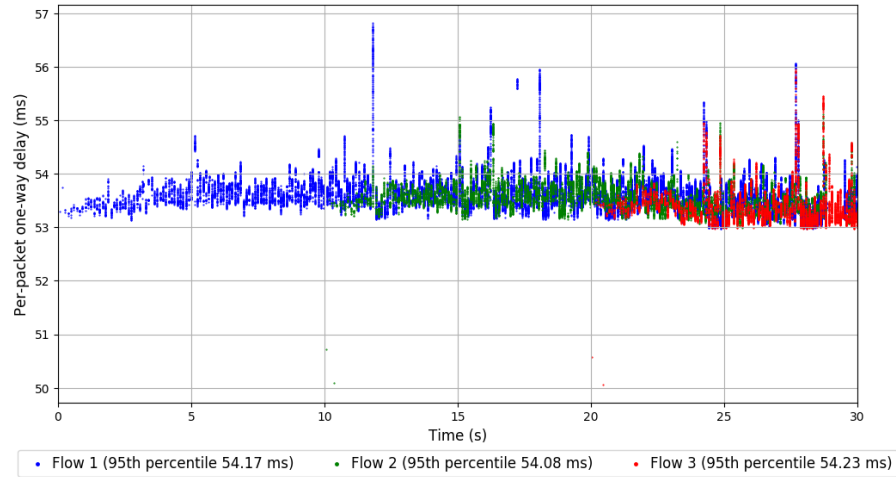
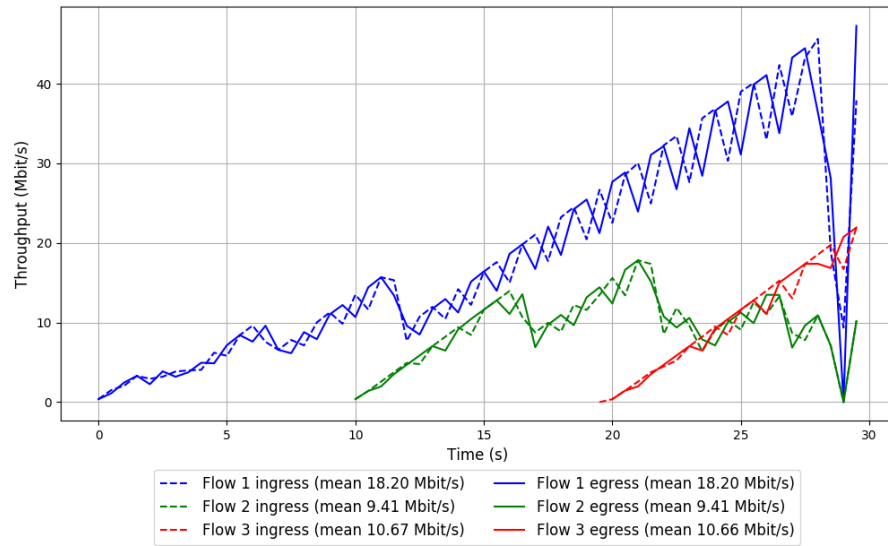


```
Run 1: Statistics of LEDBAT

Start at: 2018-02-14 08:30:44
End at: 2018-02-14 08:31:14

# Below is generated by plot.py at 2018-02-14 14:08:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 27.99 Mbit/s
95th percentile per-packet one-way delay: 54.150 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 18.20 Mbit/s
95th percentile per-packet one-way delay: 54.169 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 9.41 Mbit/s
95th percentile per-packet one-way delay: 54.079 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.66 Mbit/s
95th percentile per-packet one-way delay: 54.234 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link

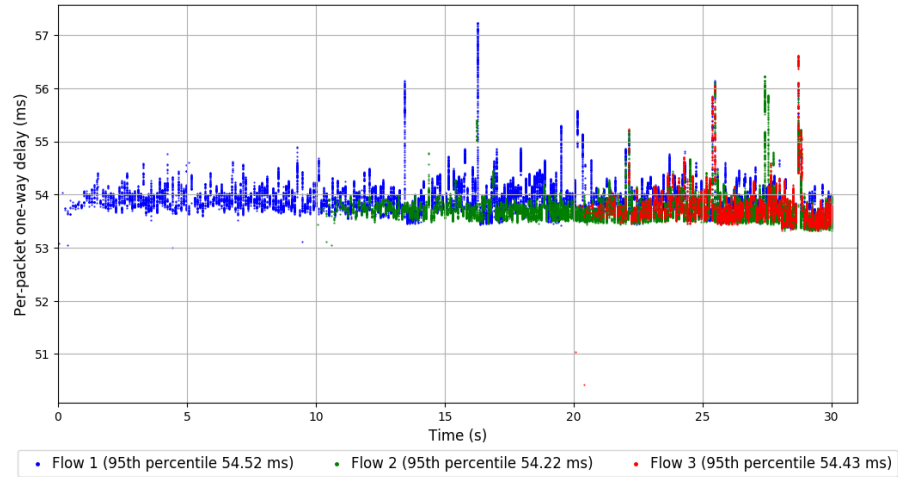
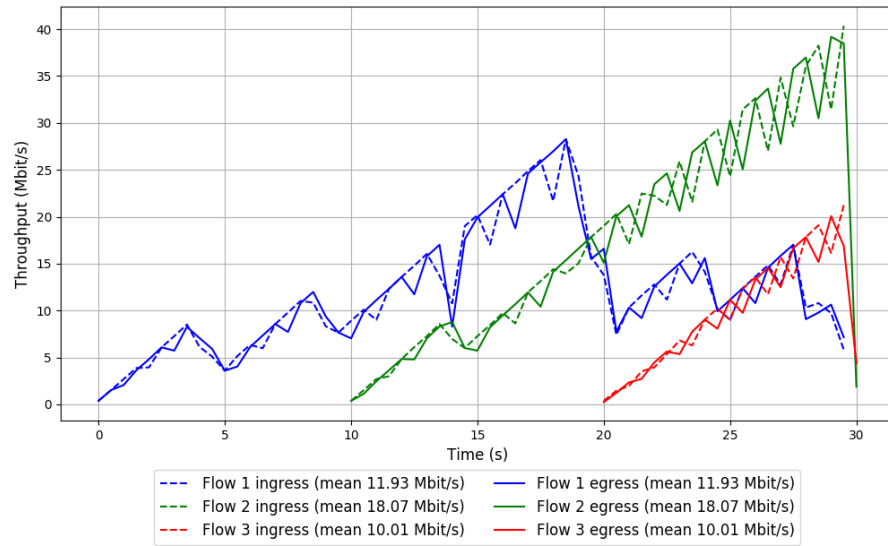


```
Run 2: Statistics of LEDBAT

Start at: 2018-02-14 08:48:00
End at: 2018-02-14 08:48:30

# Below is generated by plot.py at 2018-02-14 14:08:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 27.26 Mbit/s
95th percentile per-packet one-way delay: 54.424 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 11.93 Mbit/s
95th percentile per-packet one-way delay: 54.525 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 18.07 Mbit/s
95th percentile per-packet one-way delay: 54.217 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.01 Mbit/s
95th percentile per-packet one-way delay: 54.426 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-02-14 09:05:24

End at: 2018-02-14 09:05:54

Below is generated by plot.py at 2018-02-14 14:08:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 27.15 Mbit/s

95th percentile per-packet one-way delay: 54.326 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 11.32 Mbit/s

95th percentile per-packet one-way delay: 54.477 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 18.81 Mbit/s

95th percentile per-packet one-way delay: 53.931 ms

Loss rate: 0.00%

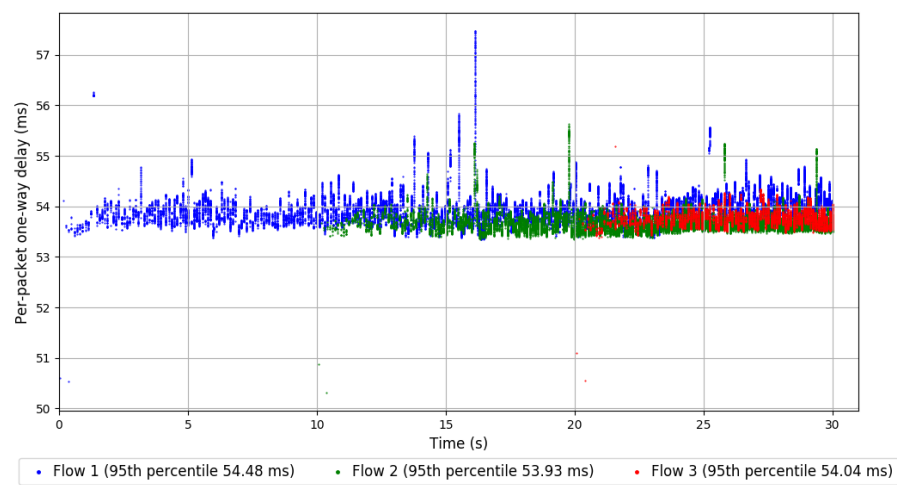
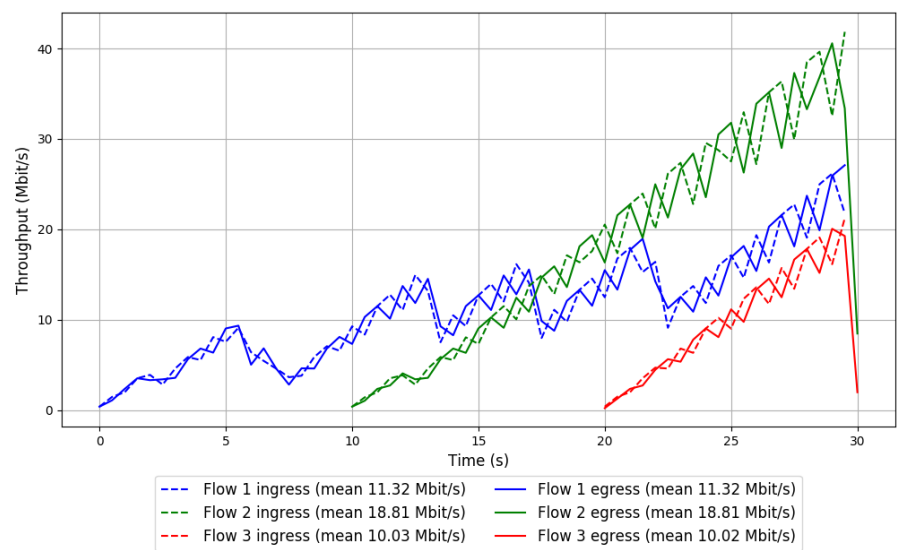
-- Flow 3:

Average throughput: 10.02 Mbit/s

95th percentile per-packet one-way delay: 54.042 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-02-14 09:23:03

End at: 2018-02-14 09:23:33

Below is generated by plot.py at 2018-02-14 14:08:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 25.59 Mbit/s

95th percentile per-packet one-way delay: 54.674 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 14.07 Mbit/s

95th percentile per-packet one-way delay: 54.636 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 12.40 Mbit/s

95th percentile per-packet one-way delay: 54.734 ms

Loss rate: 0.00%

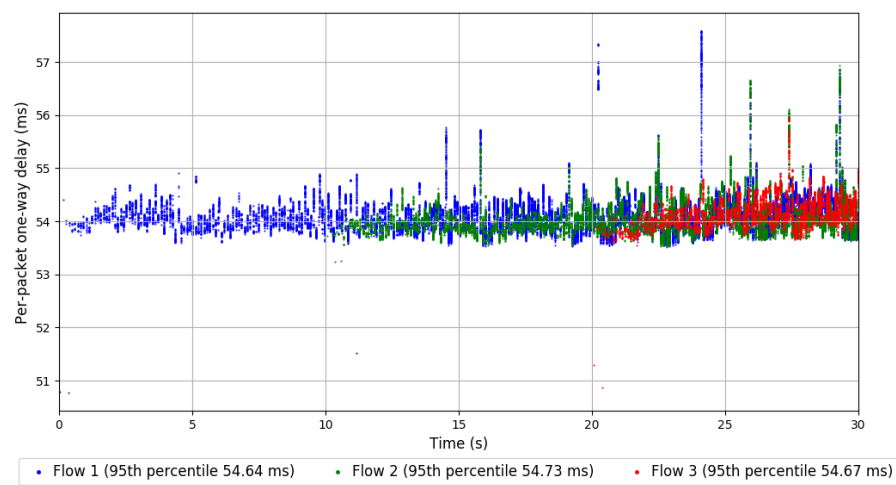
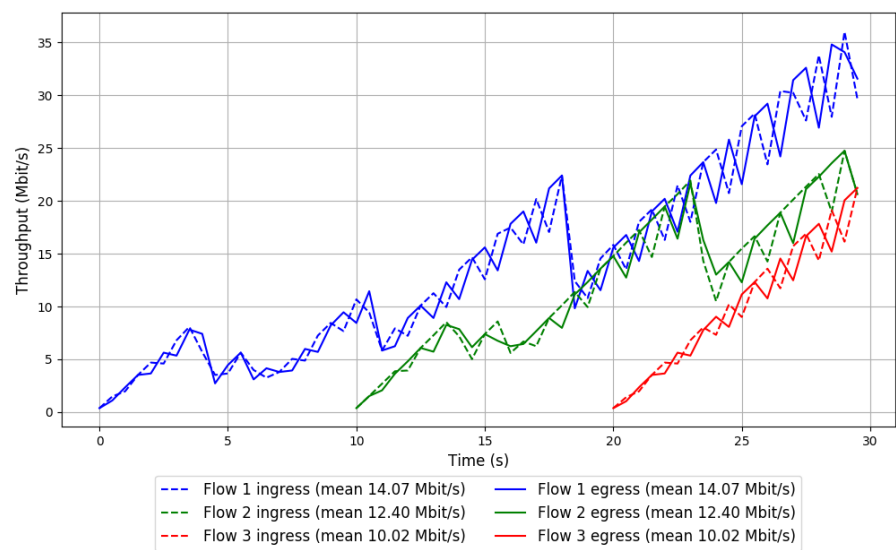
-- Flow 3:

Average throughput: 10.02 Mbit/s

95th percentile per-packet one-way delay: 54.669 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-02-14 09:40:37

End at: 2018-02-14 09:41:07

Below is generated by plot.py at 2018-02-14 14:08:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 38.86 Mbit/s

95th percentile per-packet one-way delay: 55.264 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 25.34 Mbit/s

95th percentile per-packet one-way delay: 55.222 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 16.43 Mbit/s

95th percentile per-packet one-way delay: 55.437 ms

Loss rate: 0.00%

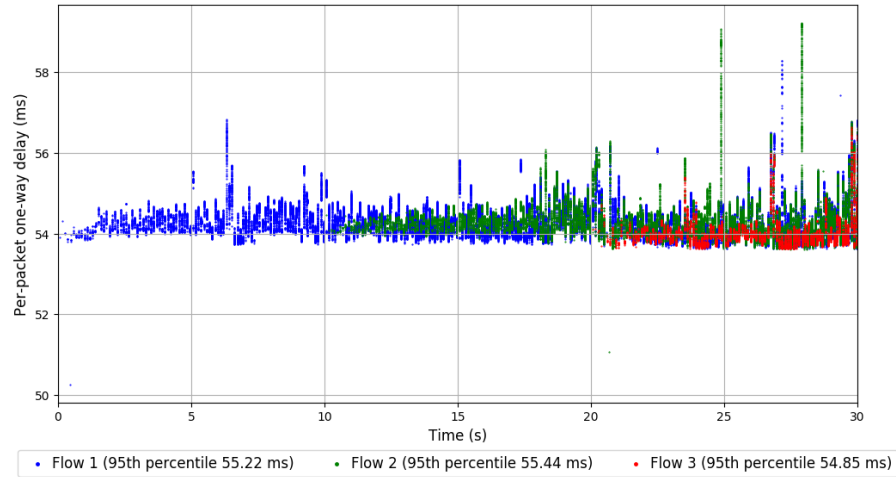
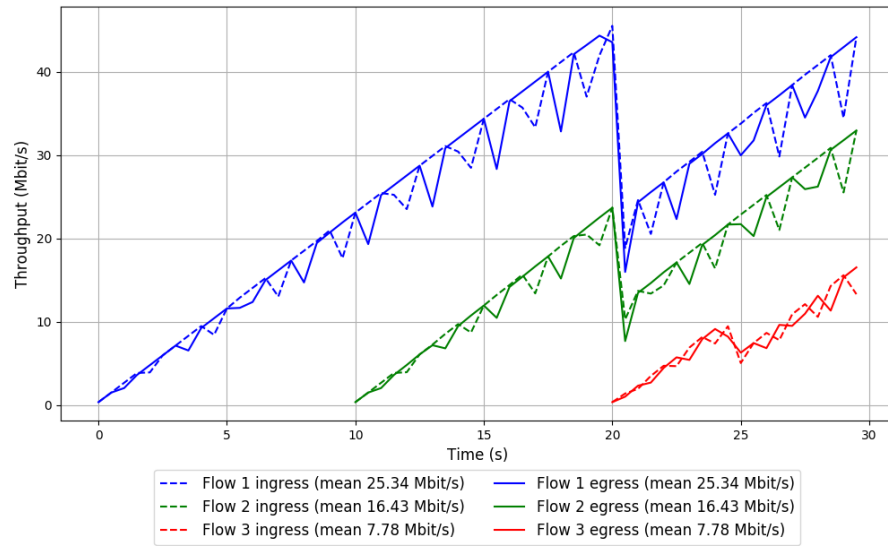
-- Flow 3:

Average throughput: 7.78 Mbit/s

95th percentile per-packet one-way delay: 54.847 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-02-14 09:58:06

End at: 2018-02-14 09:58:36

Below is generated by plot.py at 2018-02-14 14:08:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 48.76 Mbit/s

95th percentile per-packet one-way delay: 54.592 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 31.91 Mbit/s

95th percentile per-packet one-way delay: 54.599 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 20.62 Mbit/s

95th percentile per-packet one-way delay: 54.639 ms

Loss rate: 0.00%

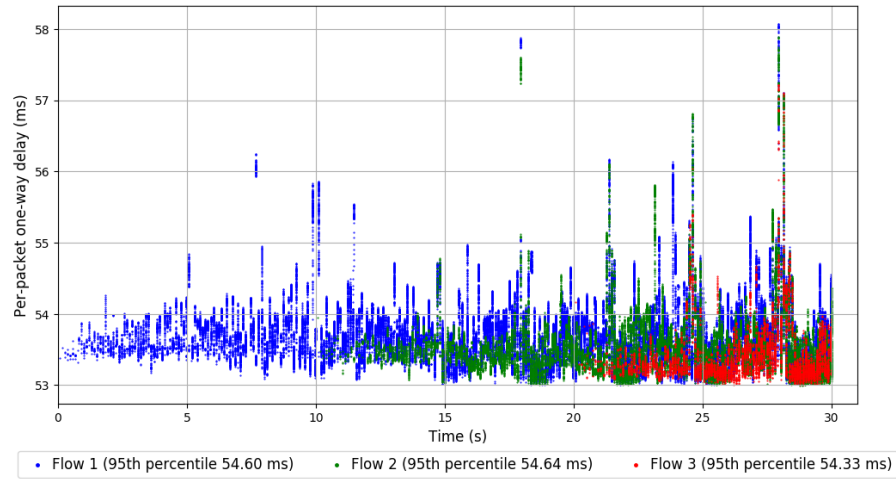
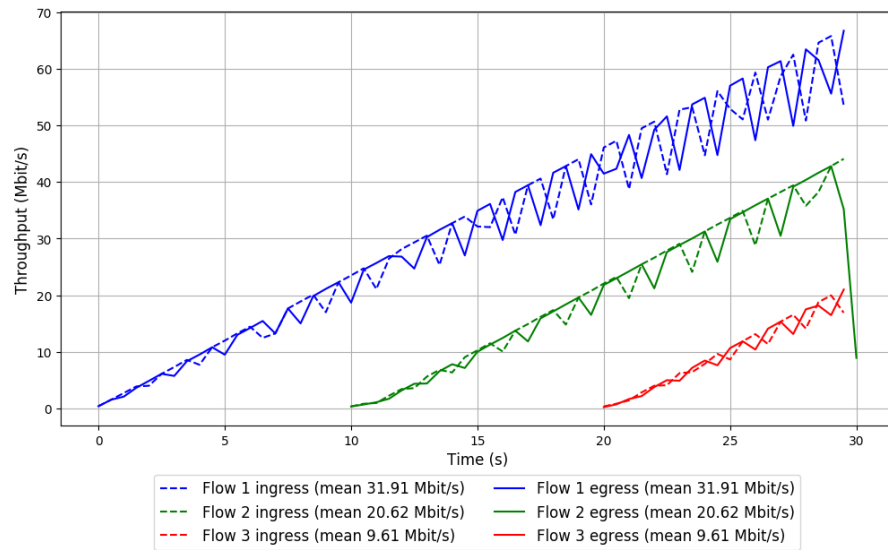
-- Flow 3:

Average throughput: 9.61 Mbit/s

95th percentile per-packet one-way delay: 54.329 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link

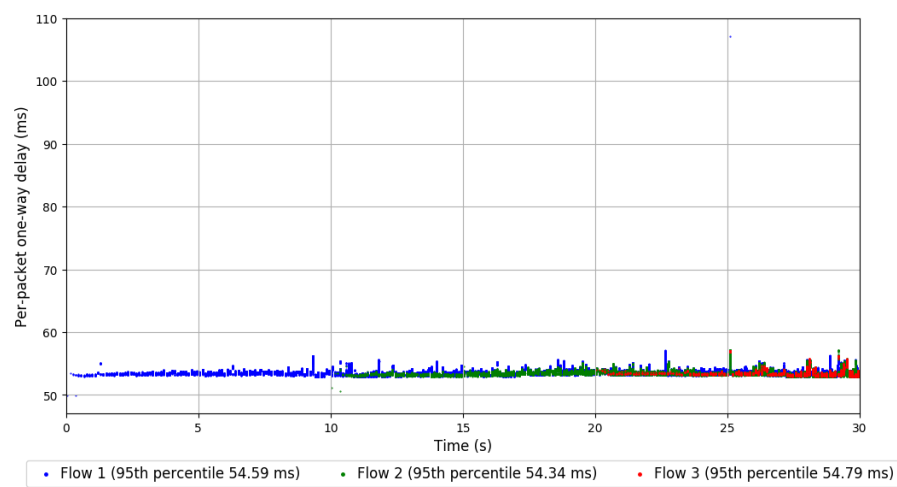
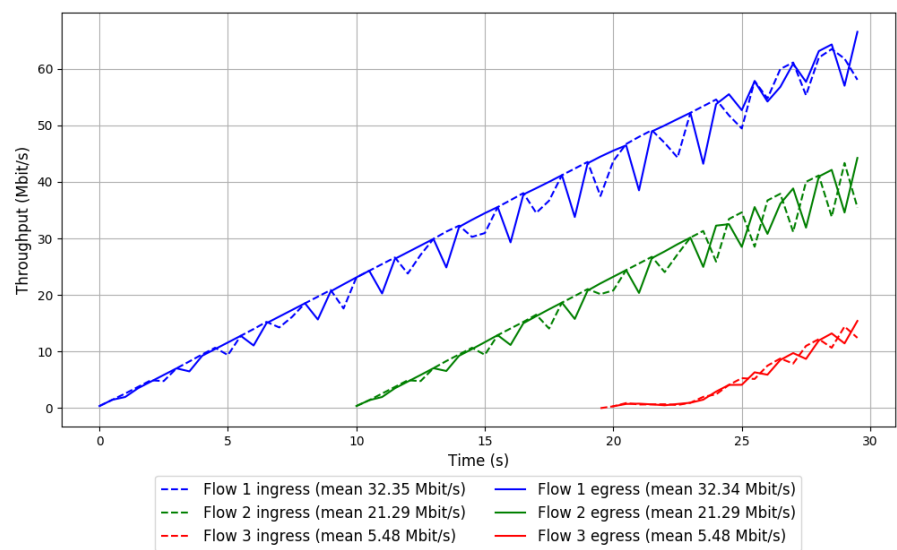


```
Run 7: Statistics of LEDBAT

Start at: 2018-02-14 10:15:50
End at: 2018-02-14 10:16:20

# Below is generated by plot.py at 2018-02-14 14:08:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.31 Mbit/s
95th percentile per-packet one-way delay: 54.544 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 32.34 Mbit/s
95th percentile per-packet one-way delay: 54.586 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 21.29 Mbit/s
95th percentile per-packet one-way delay: 54.338 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 5.48 Mbit/s
95th percentile per-packet one-way delay: 54.793 ms
Loss rate: 0.00%
```

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-02-14 10:33:27

End at: 2018-02-14 10:33:57

Below is generated by plot.py at 2018-02-14 14:08:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 49.96 Mbit/s

95th percentile per-packet one-way delay: 54.796 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 32.29 Mbit/s

95th percentile per-packet one-way delay: 54.880 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.24 Mbit/s

95th percentile per-packet one-way delay: 54.530 ms

Loss rate: 0.00%

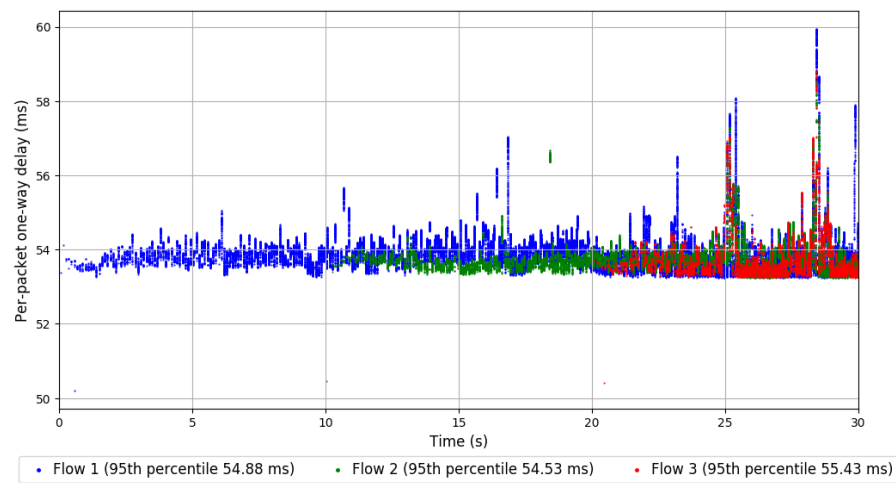
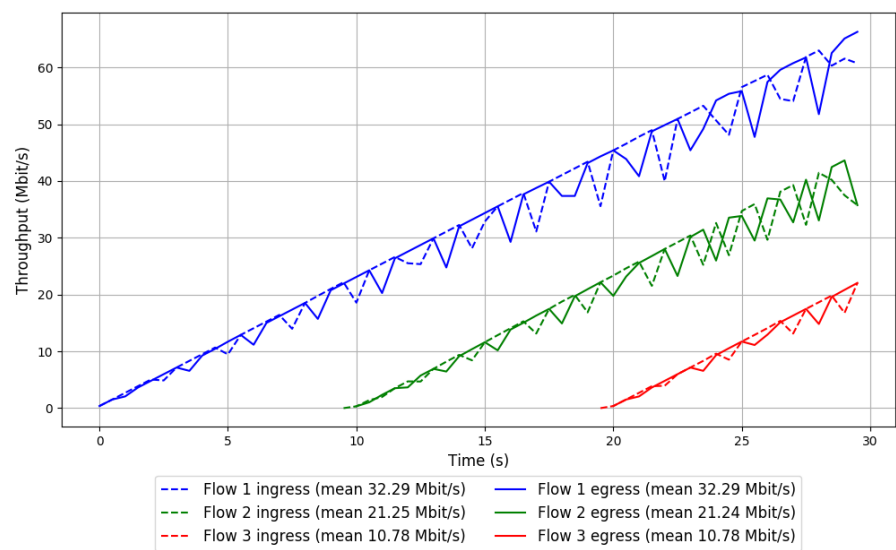
-- Flow 3:

Average throughput: 10.78 Mbit/s

95th percentile per-packet one-way delay: 55.431 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-02-14 10:50:56

End at: 2018-02-14 10:51:26

Below is generated by plot.py at 2018-02-14 14:08:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 45.68 Mbit/s

95th percentile per-packet one-way delay: 54.533 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 30.06 Mbit/s

95th percentile per-packet one-way delay: 54.411 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 18.97 Mbit/s

95th percentile per-packet one-way delay: 54.916 ms

Loss rate: 0.32%

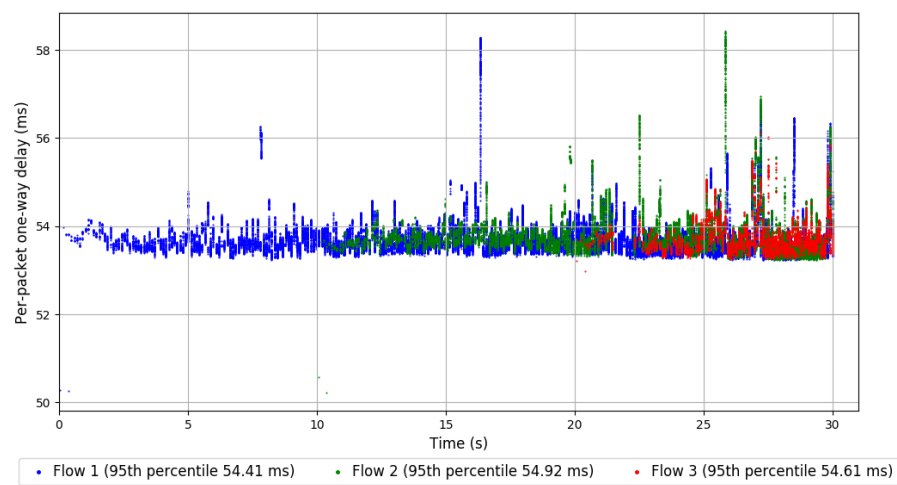
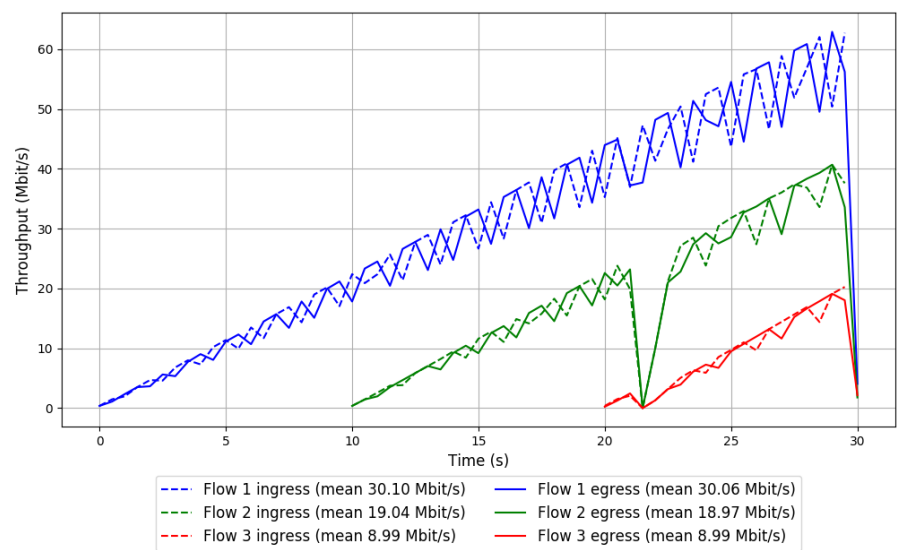
-- Flow 3:

Average throughput: 8.99 Mbit/s

95th percentile per-packet one-way delay: 54.606 ms

Loss rate: 0.04%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-02-14 11:08:32

End at: 2018-02-14 11:09:02

Below is generated by plot.py at 2018-02-14 14:08:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 48.46 Mbit/s

95th percentile per-packet one-way delay: 54.831 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 30.29 Mbit/s

95th percentile per-packet one-way delay: 54.811 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 22.07 Mbit/s

95th percentile per-packet one-way delay: 54.945 ms

Loss rate: 0.27%

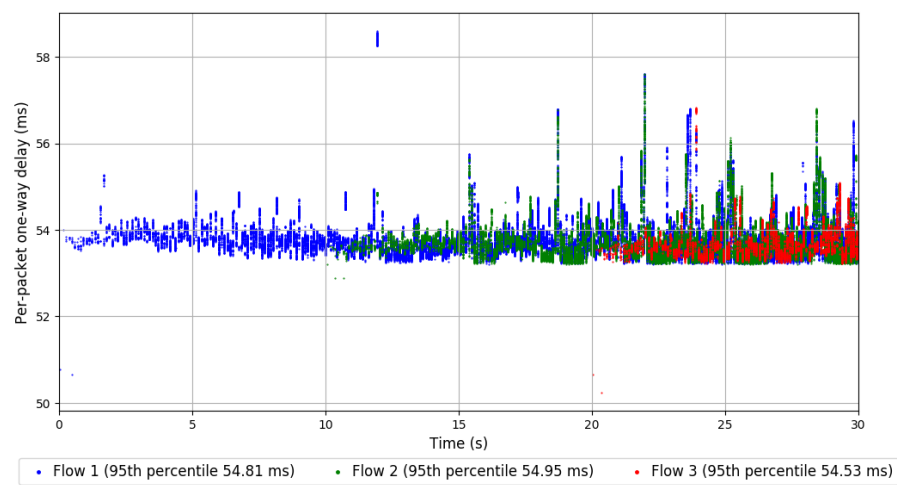
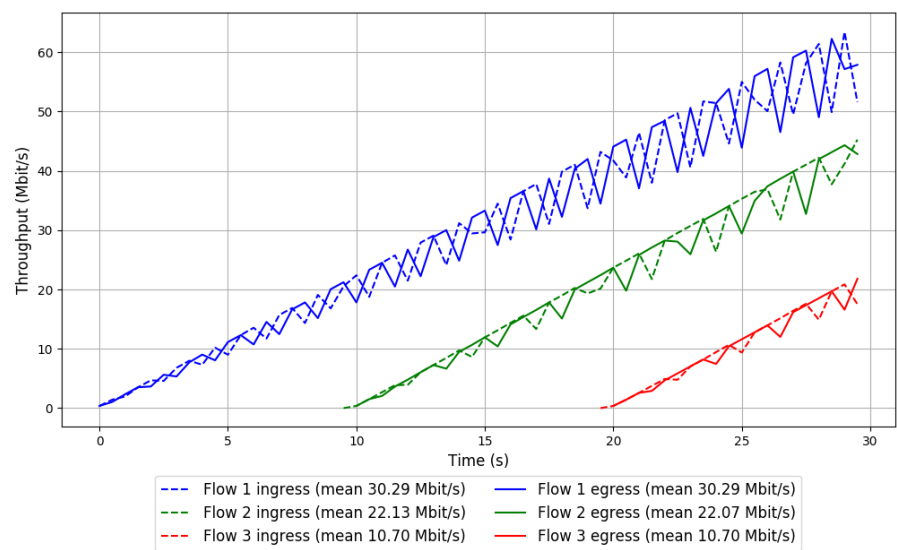
-- Flow 3:

Average throughput: 10.70 Mbit/s

95th percentile per-packet one-way delay: 54.531 ms

Loss rate: 0.00%

Run 10: Report of LEDBAT — Data Link

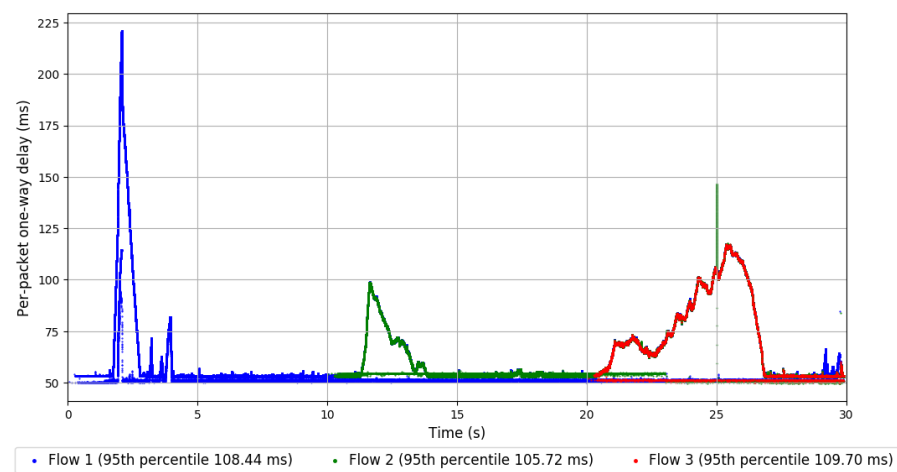
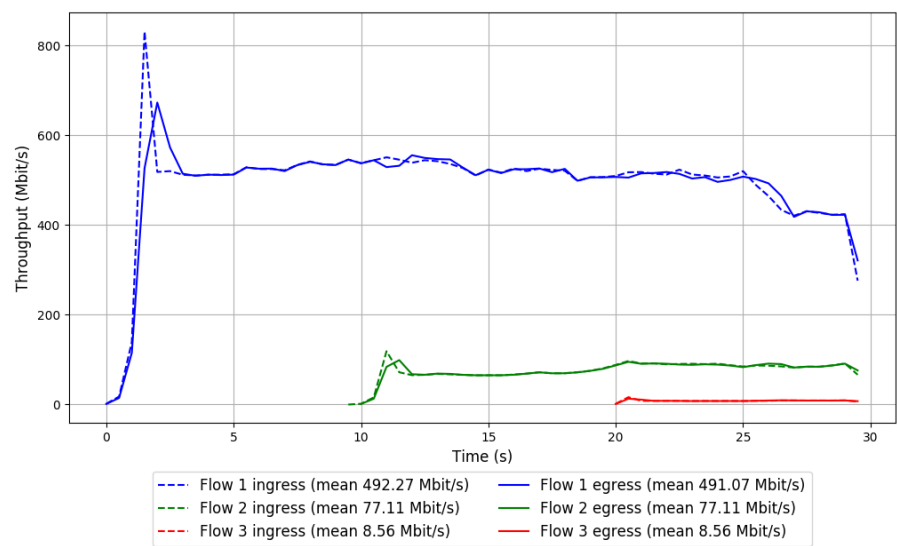


```
Run 1: Statistics of PCC

Start at: 2018-02-14 08:34:04
End at: 2018-02-14 08:34:34

# Below is generated by plot.py at 2018-02-14 14:14:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 545.18 Mbit/s
95th percentile per-packet one-way delay: 108.275 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 491.07 Mbit/s
95th percentile per-packet one-way delay: 108.439 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 77.11 Mbit/s
95th percentile per-packet one-way delay: 105.724 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 8.56 Mbit/s
95th percentile per-packet one-way delay: 109.702 ms
Loss rate: 0.03%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-02-14 08:51:25

End at: 2018-02-14 08:51:55

Below is generated by plot.py at 2018-02-14 14:15:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 557.30 Mbit/s

95th percentile per-packet one-way delay: 176.958 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 497.82 Mbit/s

95th percentile per-packet one-way delay: 176.693 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 58.84 Mbit/s

95th percentile per-packet one-way delay: 177.378 ms

Loss rate: 0.56%

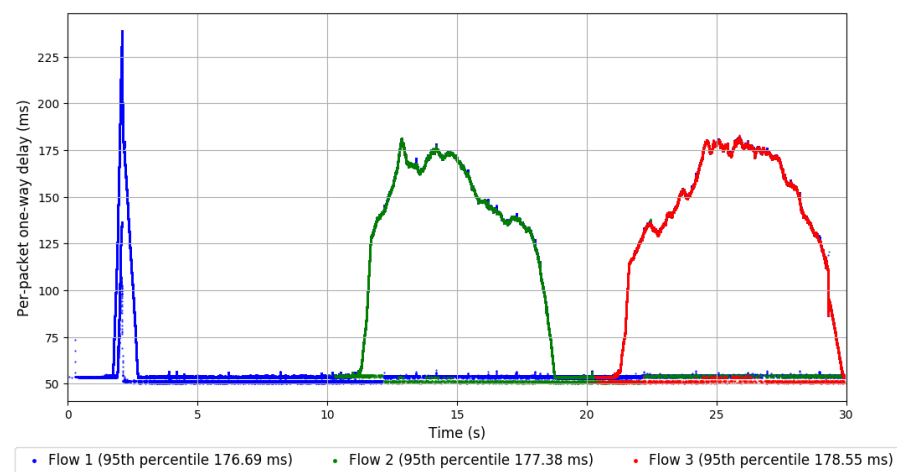
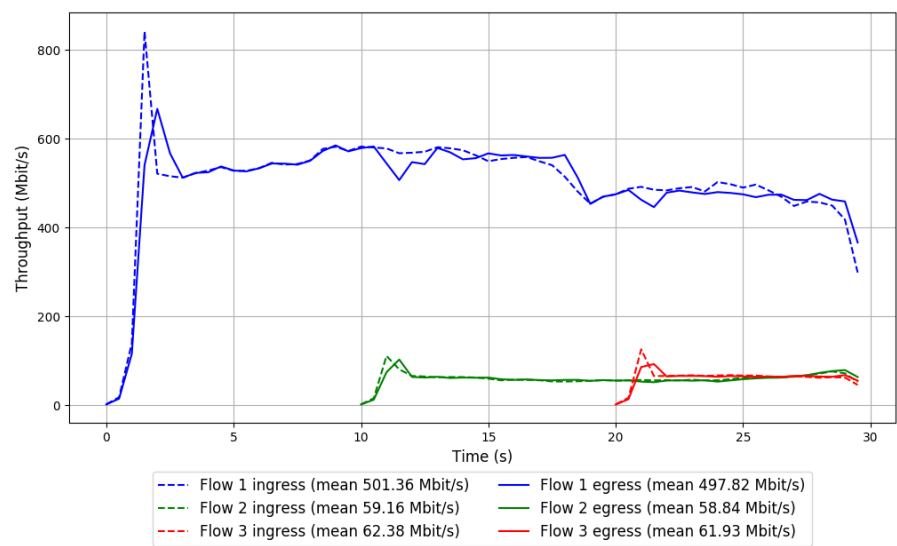
-- Flow 3:

Average throughput: 61.93 Mbit/s

95th percentile per-packet one-way delay: 178.553 ms

Loss rate: 0.72%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-02-14 09:08:46

End at: 2018-02-14 09:09:16

Below is generated by plot.py at 2018-02-14 14:15:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 538.59 Mbit/s

95th percentile per-packet one-way delay: 177.428 ms

Loss rate: 1.32%

-- Flow 1:

Average throughput: 505.03 Mbit/s

95th percentile per-packet one-way delay: 177.652 ms

Loss rate: 1.36%

-- Flow 2:

Average throughput: 34.04 Mbit/s

95th percentile per-packet one-way delay: 180.991 ms

Loss rate: 1.05%

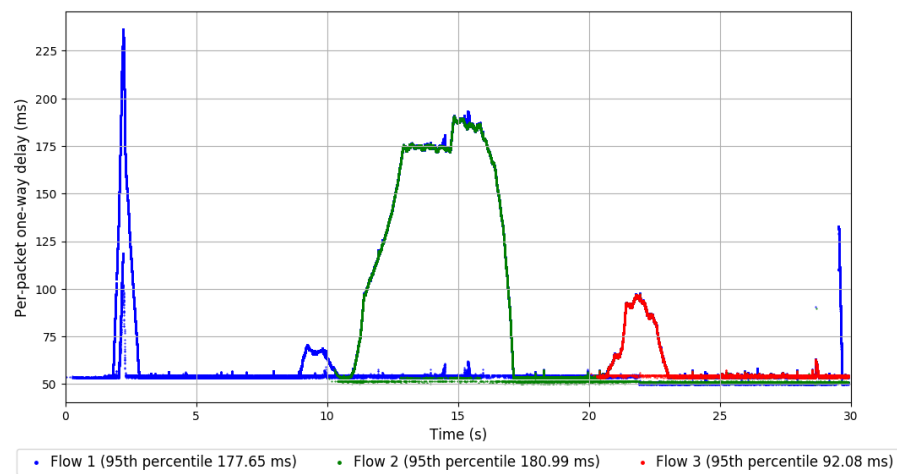
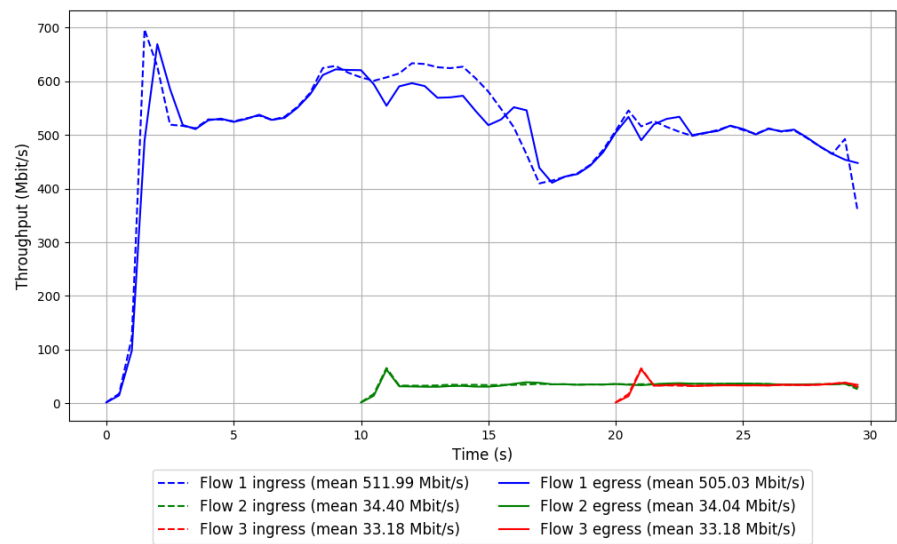
-- Flow 3:

Average throughput: 33.18 Mbit/s

95th percentile per-packet one-way delay: 92.079 ms

Loss rate: 0.01%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-02-14 09:26:23

End at: 2018-02-14 09:26:53

Below is generated by plot.py at 2018-02-14 14:15:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 551.65 Mbit/s

95th percentile per-packet one-way delay: 179.198 ms

Loss rate: 0.86%

-- Flow 1:

Average throughput: 489.80 Mbit/s

95th percentile per-packet one-way delay: 179.314 ms

Loss rate: 0.91%

-- Flow 2:

Average throughput: 62.70 Mbit/s

95th percentile per-packet one-way delay: 179.775 ms

Loss rate: 0.70%

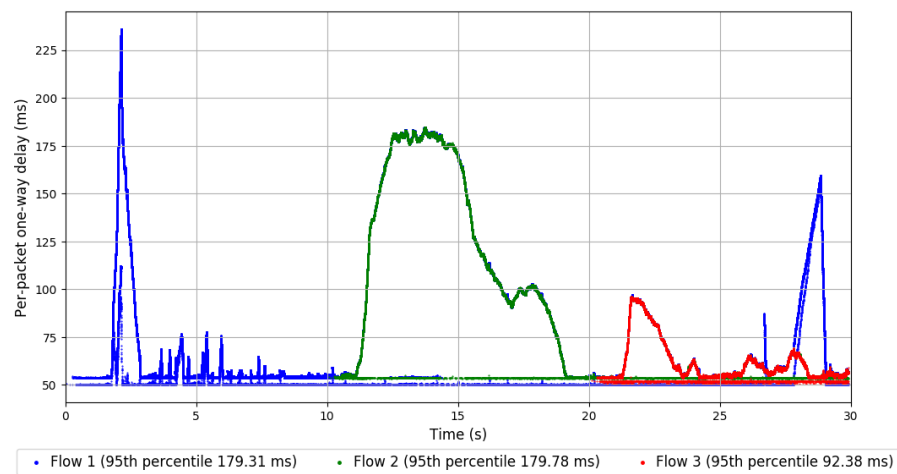
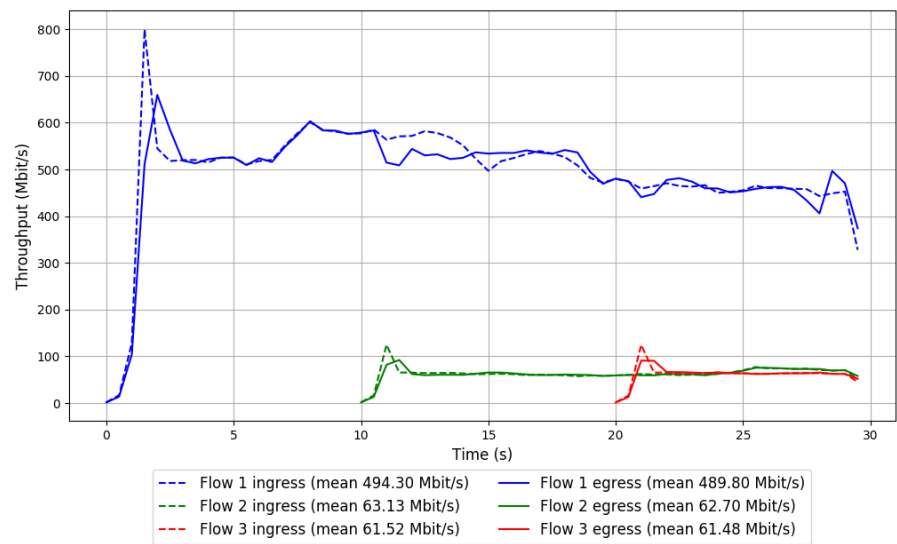
-- Flow 3:

Average throughput: 61.48 Mbit/s

95th percentile per-packet one-way delay: 92.383 ms

Loss rate: 0.05%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-02-14 09:43:57

End at: 2018-02-14 09:44:27

Below is generated by plot.py at 2018-02-14 14:15:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 538.19 Mbit/s

95th percentile per-packet one-way delay: 136.851 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 464.74 Mbit/s

95th percentile per-packet one-way delay: 138.293 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 79.10 Mbit/s

95th percentile per-packet one-way delay: 131.993 ms

Loss rate: 0.01%

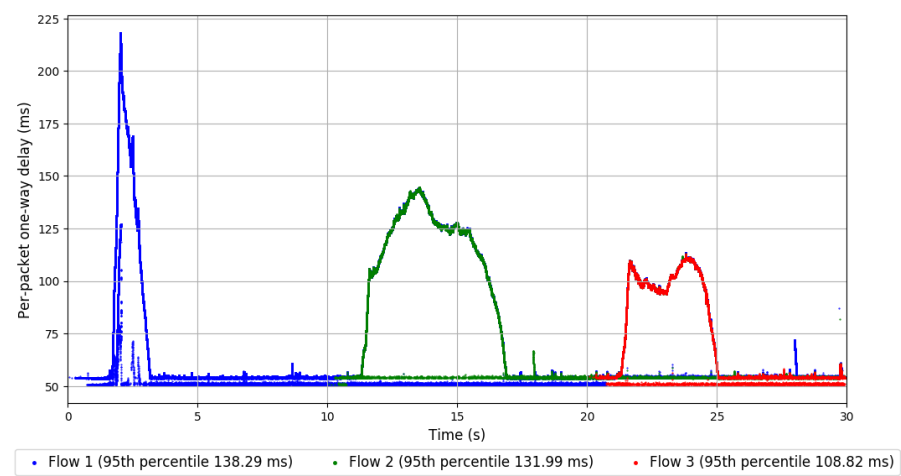
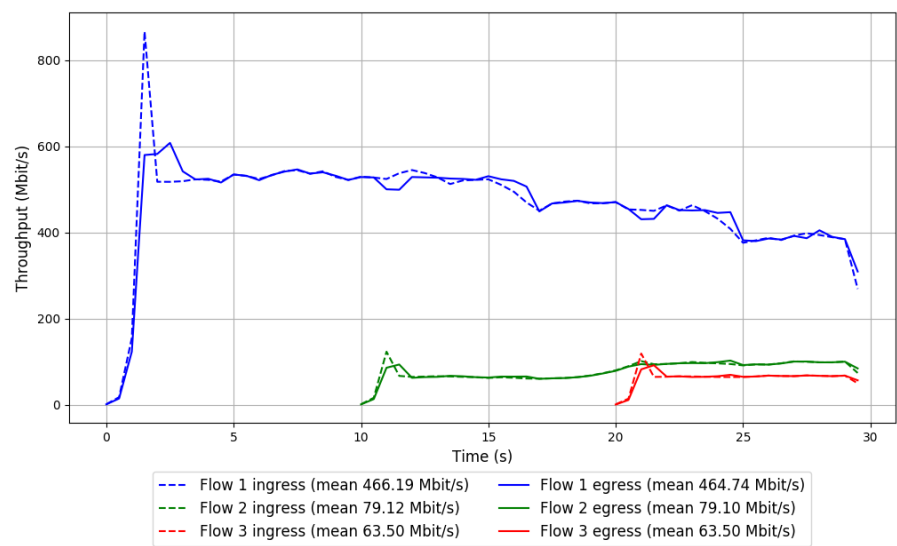
-- Flow 3:

Average throughput: 63.50 Mbit/s

95th percentile per-packet one-way delay: 108.822 ms

Loss rate: 0.02%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-02-14 10:01:31

End at: 2018-02-14 10:02:01

Below is generated by plot.py at 2018-02-14 14:16:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 567.65 Mbit/s

95th percentile per-packet one-way delay: 180.253 ms

Loss rate: 2.86%

-- Flow 1:

Average throughput: 514.96 Mbit/s

95th percentile per-packet one-way delay: 180.134 ms

Loss rate: 2.77%

-- Flow 2:

Average throughput: 64.80 Mbit/s

95th percentile per-packet one-way delay: 180.324 ms

Loss rate: 3.09%

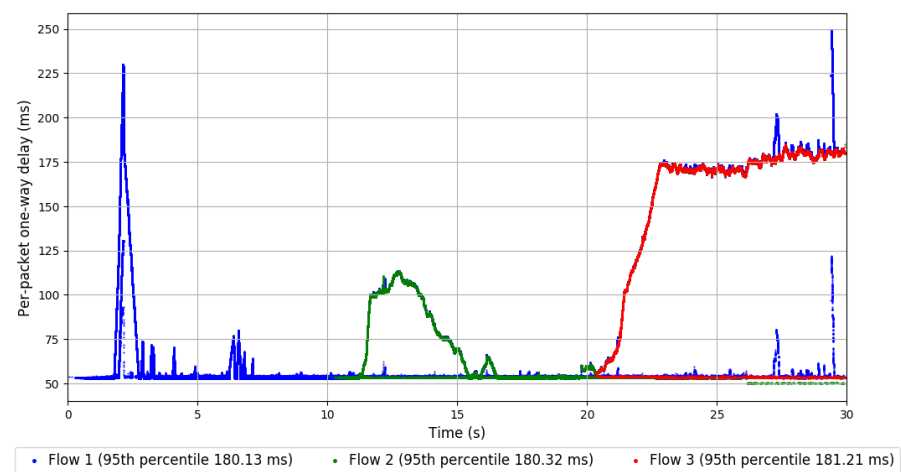
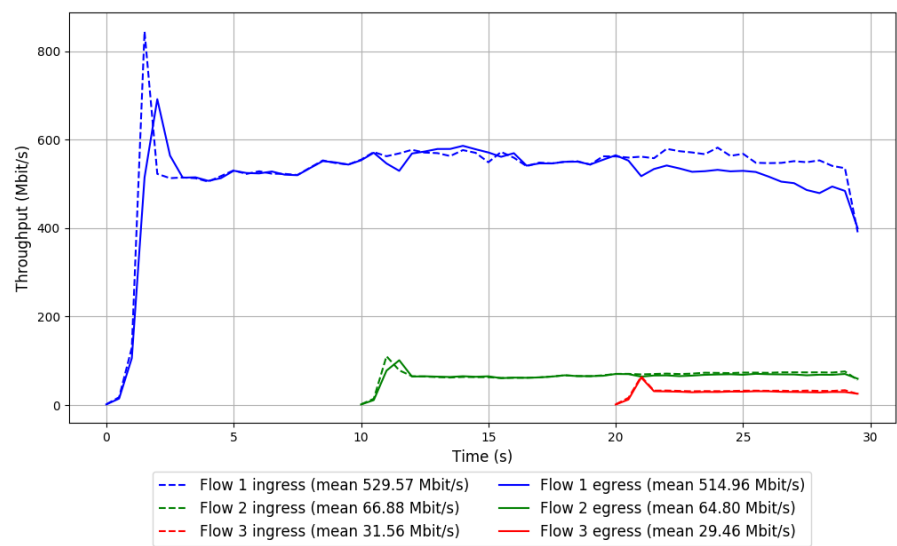
-- Flow 3:

Average throughput: 29.46 Mbit/s

95th percentile per-packet one-way delay: 181.212 ms

Loss rate: 6.65%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-02-14 10:19:08

End at: 2018-02-14 10:19:38

Below is generated by plot.py at 2018-02-14 14:18:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 566.59 Mbit/s

95th percentile per-packet one-way delay: 173.550 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 504.76 Mbit/s

95th percentile per-packet one-way delay: 173.472 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 61.90 Mbit/s

95th percentile per-packet one-way delay: 173.888 ms

Loss rate: 0.46%

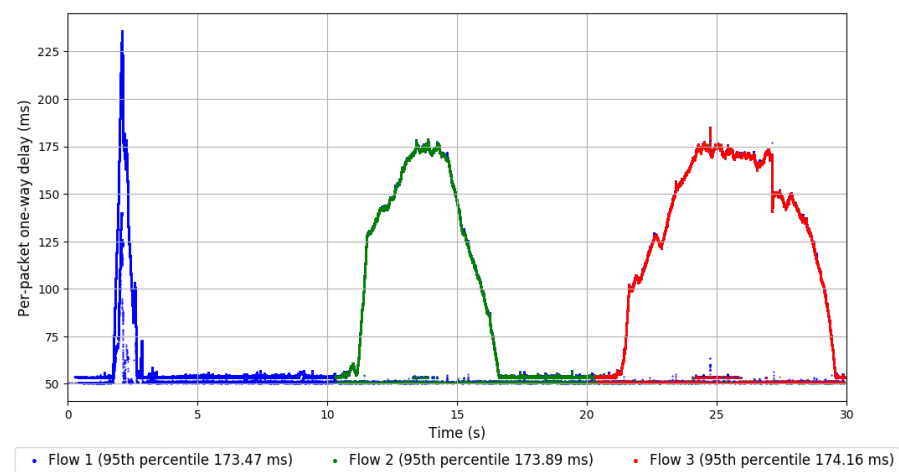
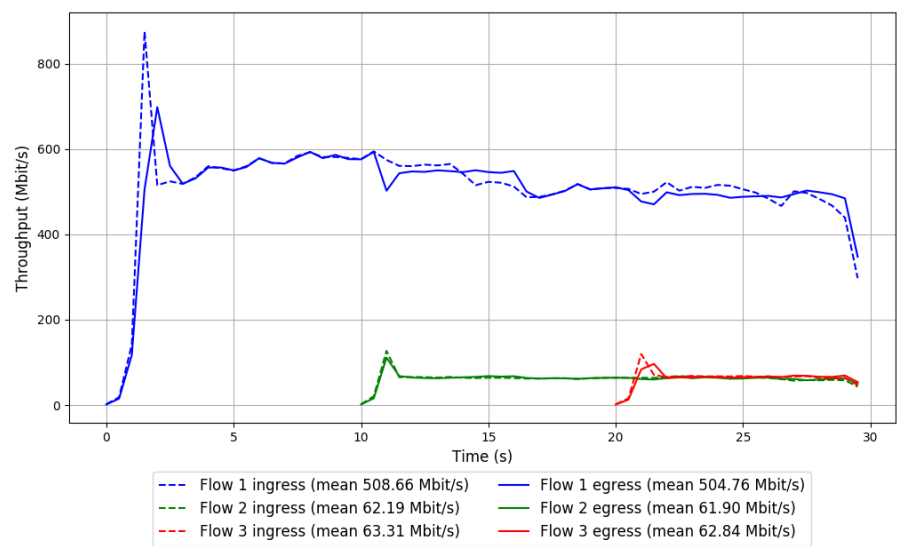
-- Flow 3:

Average throughput: 62.84 Mbit/s

95th percentile per-packet one-way delay: 174.161 ms

Loss rate: 0.75%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-02-14 10:36:51

End at: 2018-02-14 10:37:21

Below is generated by plot.py at 2018-02-14 14:18:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 543.69 Mbit/s

95th percentile per-packet one-way delay: 122.106 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 488.05 Mbit/s

95th percentile per-packet one-way delay: 122.385 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 65.58 Mbit/s

95th percentile per-packet one-way delay: 118.279 ms

Loss rate: 0.08%

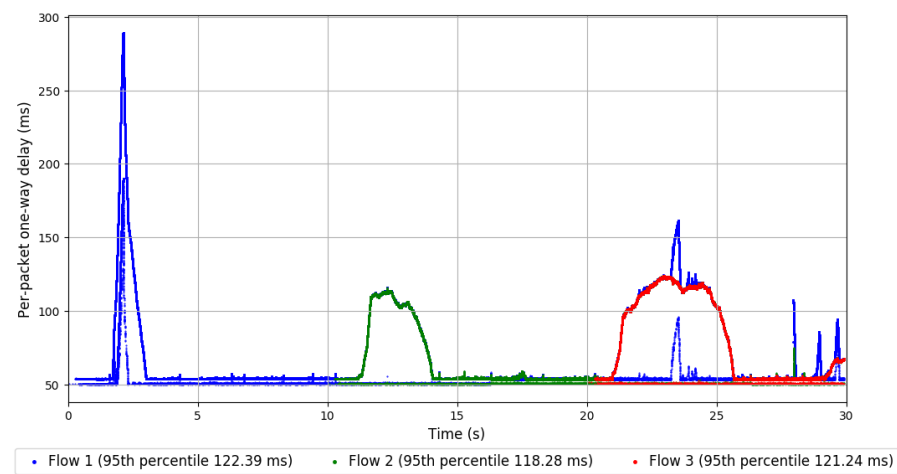
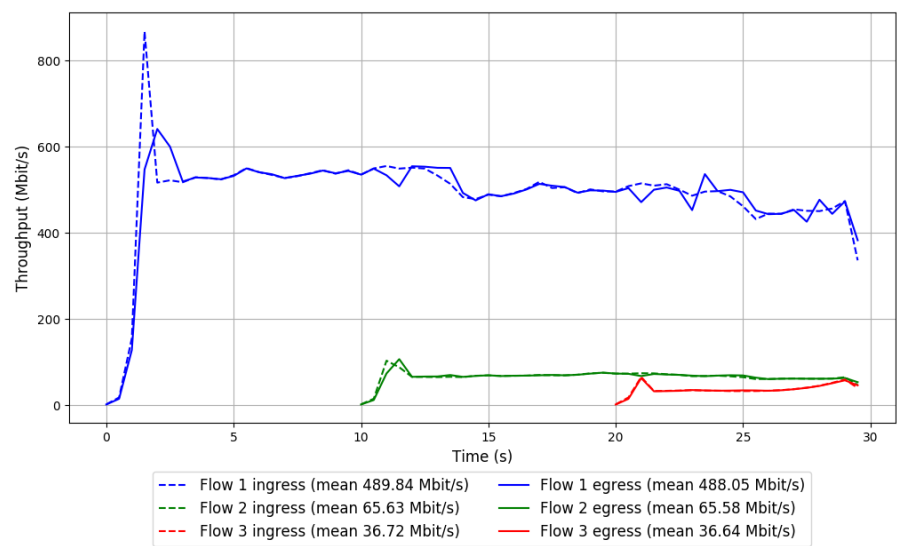
-- Flow 3:

Average throughput: 36.64 Mbit/s

95th percentile per-packet one-way delay: 121.237 ms

Loss rate: 0.24%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-02-14 10:54:19

End at: 2018-02-14 10:54:49

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 551.25 Mbit/s

95th percentile per-packet one-way delay: 183.879 ms

Loss rate: 2.58%

-- Flow 1:

Average throughput: 488.00 Mbit/s

95th percentile per-packet one-way delay: 183.192 ms

Loss rate: 2.28%

-- Flow 2:

Average throughput: 36.77 Mbit/s

95th percentile per-packet one-way delay: 184.179 ms

Loss rate: 2.68%

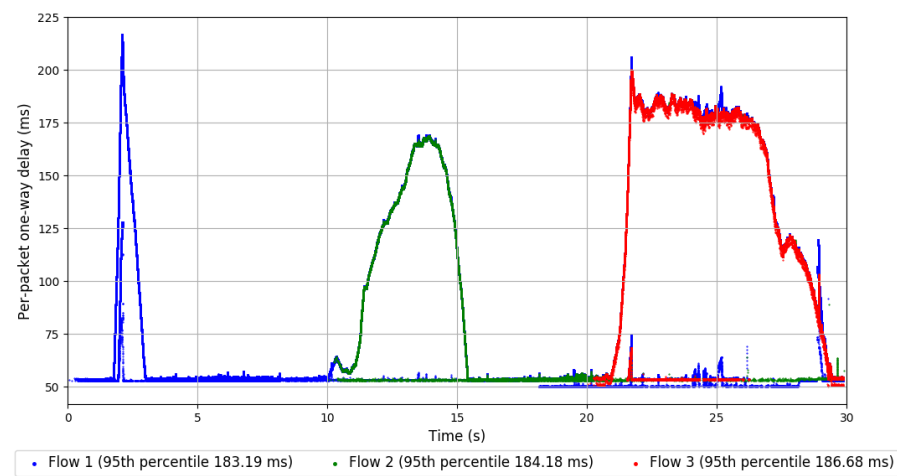
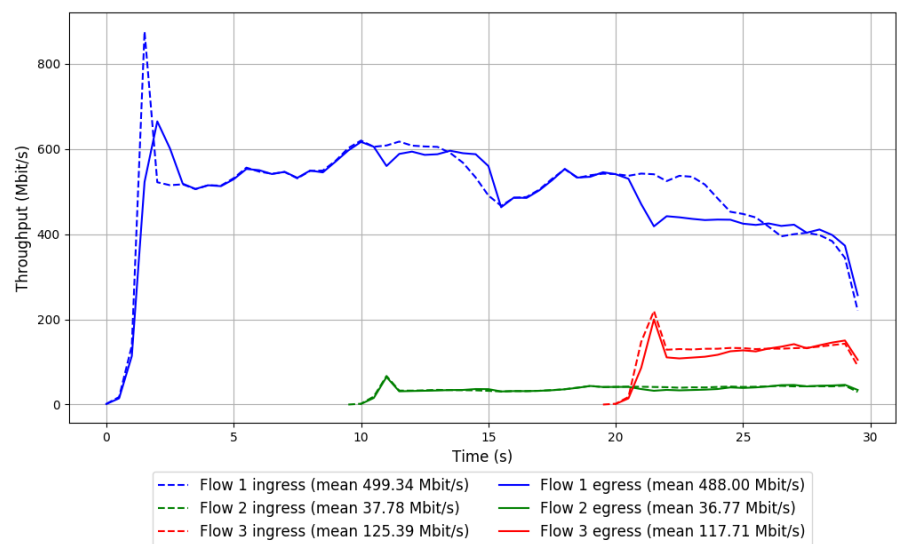
-- Flow 3:

Average throughput: 117.71 Mbit/s

95th percentile per-packet one-way delay: 186.677 ms

Loss rate: 6.13%

Run 9: Report of PCC — Data Link

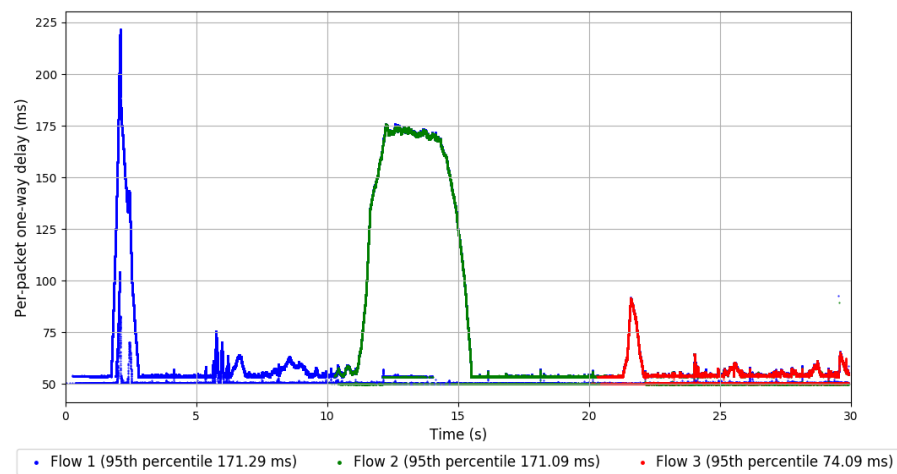
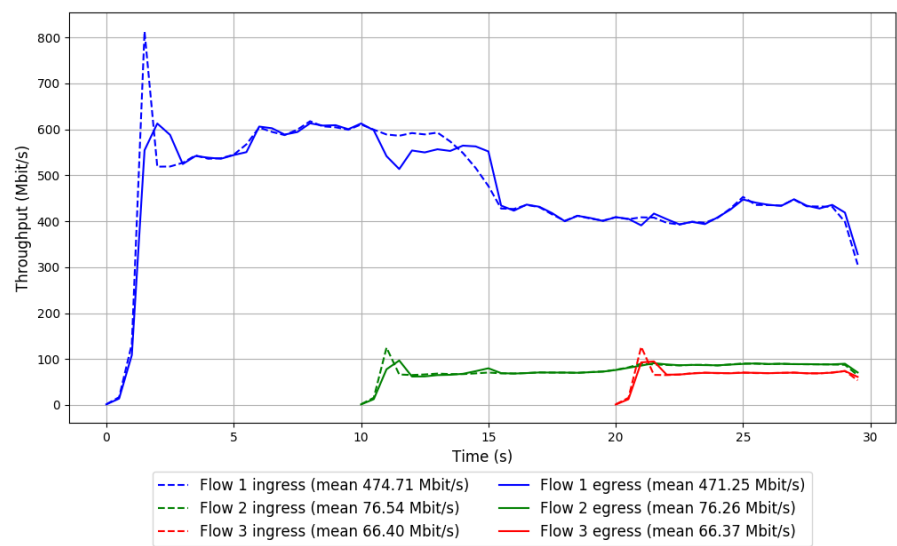


```
Run 10: Statistics of PCC

Start at: 2018-02-14 11:11:55
End at: 2018-02-14 11:12:25

# Below is generated by plot.py at 2018-02-14 14:24:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 543.76 Mbit/s
95th percentile per-packet one-way delay: 171.157 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 471.25 Mbit/s
95th percentile per-packet one-way delay: 171.289 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 76.26 Mbit/s
95th percentile per-packet one-way delay: 171.087 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 66.37 Mbit/s
95th percentile per-packet one-way delay: 74.094 ms
Loss rate: 0.04%
```

Run 10: Report of PCC — Data Link

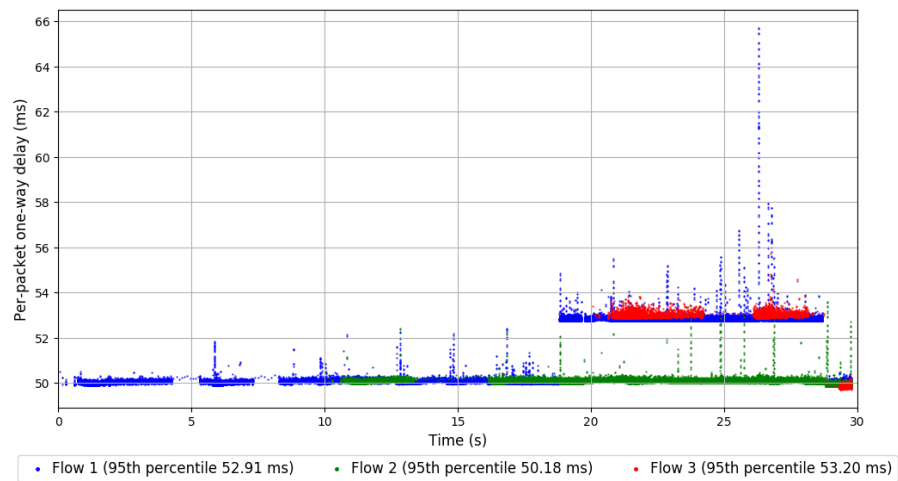
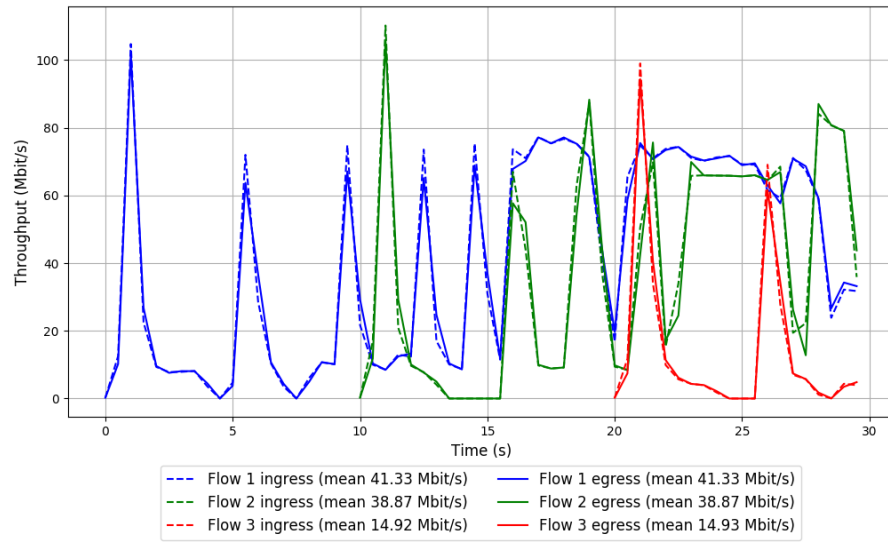


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-02-14 08:42:09
End at: 2018-02-14 08:42:39

# Below is generated by plot.py at 2018-02-14 14:24:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.00 Mbit/s
95th percentile per-packet one-way delay: 52.955 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.33 Mbit/s
95th percentile per-packet one-way delay: 52.909 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.87 Mbit/s
95th percentile per-packet one-way delay: 50.180 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 14.93 Mbit/s
95th percentile per-packet one-way delay: 53.196 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-02-14 08:59:32

End at: 2018-02-14 09:00:02

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.49 Mbit/s

95th percentile per-packet one-way delay: 53.508 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 55.55 Mbit/s

95th percentile per-packet one-way delay: 50.412 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 34.62 Mbit/s

95th percentile per-packet one-way delay: 53.467 ms

Loss rate: 0.00%

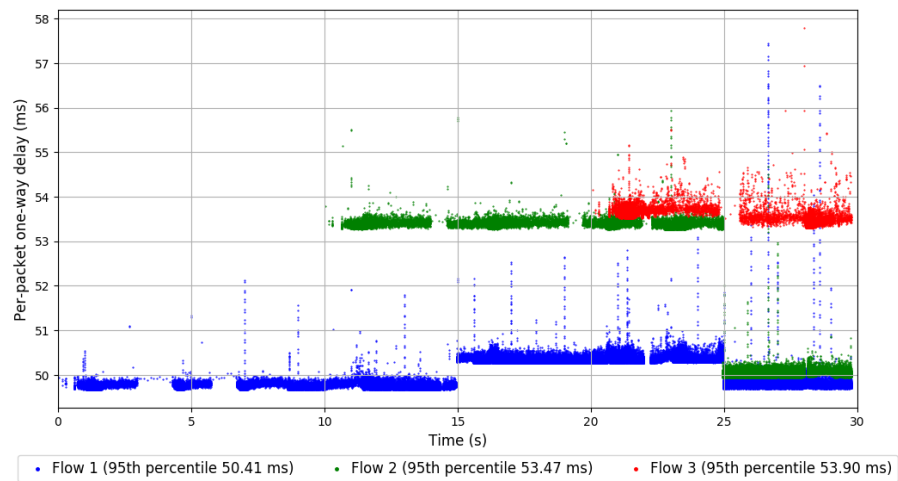
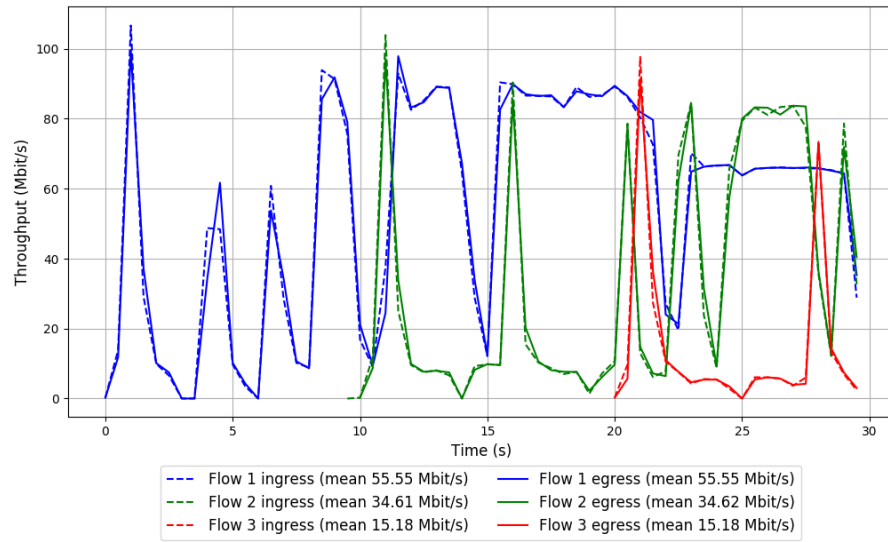
-- Flow 3:

Average throughput: 15.18 Mbit/s

95th percentile per-packet one-way delay: 53.898 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-02-14 09:17:02

End at: 2018-02-14 09:17:32

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.61 Mbit/s

95th percentile per-packet one-way delay: 53.649 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 47.77 Mbit/s

95th percentile per-packet one-way delay: 53.561 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 38.93 Mbit/s

95th percentile per-packet one-way delay: 53.739 ms

Loss rate: 0.02%

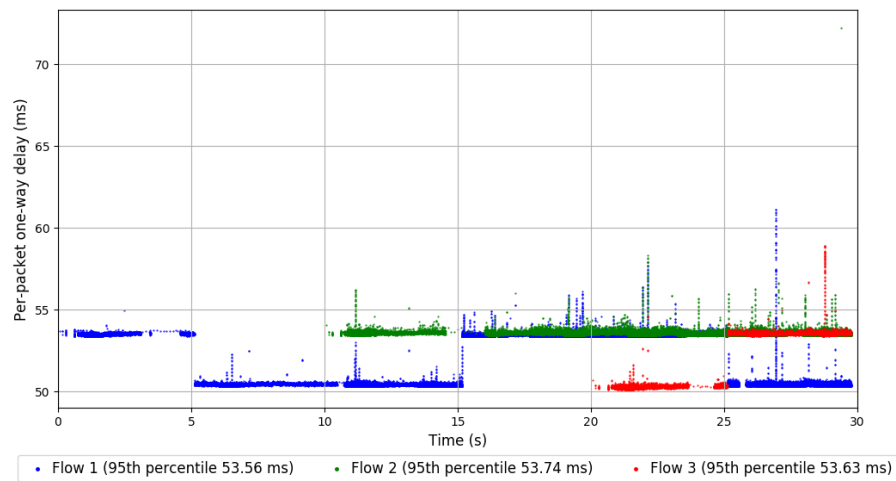
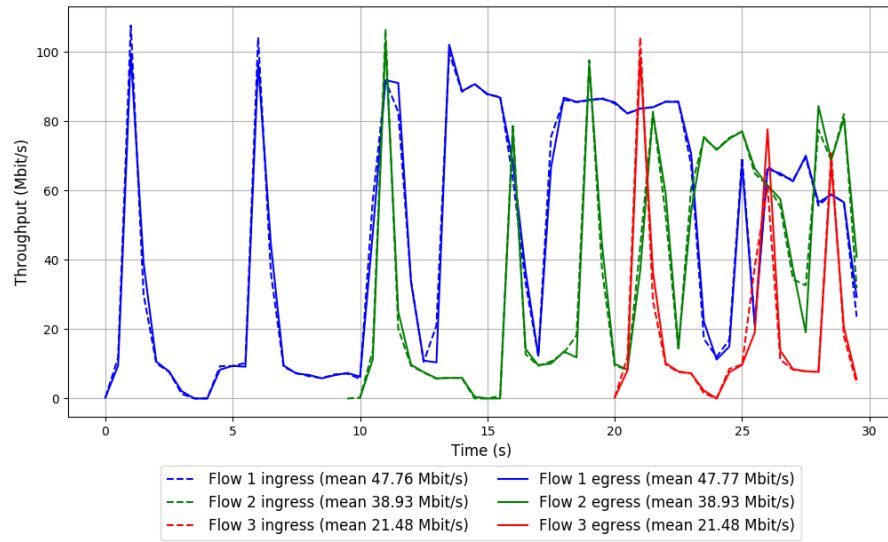
-- Flow 3:

Average throughput: 21.48 Mbit/s

95th percentile per-packet one-way delay: 53.628 ms

Loss rate: 0.01%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-02-14 09:34:46

End at: 2018-02-14 09:35:16

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.93 Mbit/s

95th percentile per-packet one-way delay: 53.777 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 52.89 Mbit/s

95th percentile per-packet one-way delay: 53.854 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 38.15 Mbit/s

95th percentile per-packet one-way delay: 53.457 ms

Loss rate: 0.01%

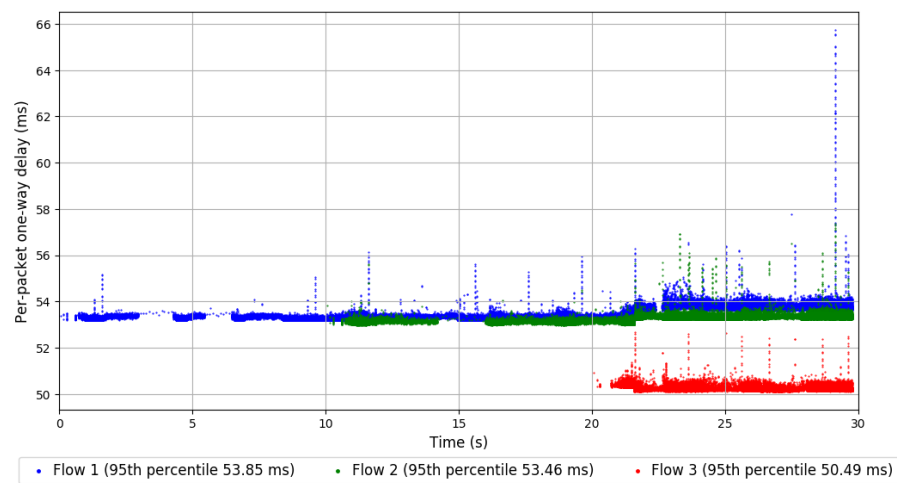
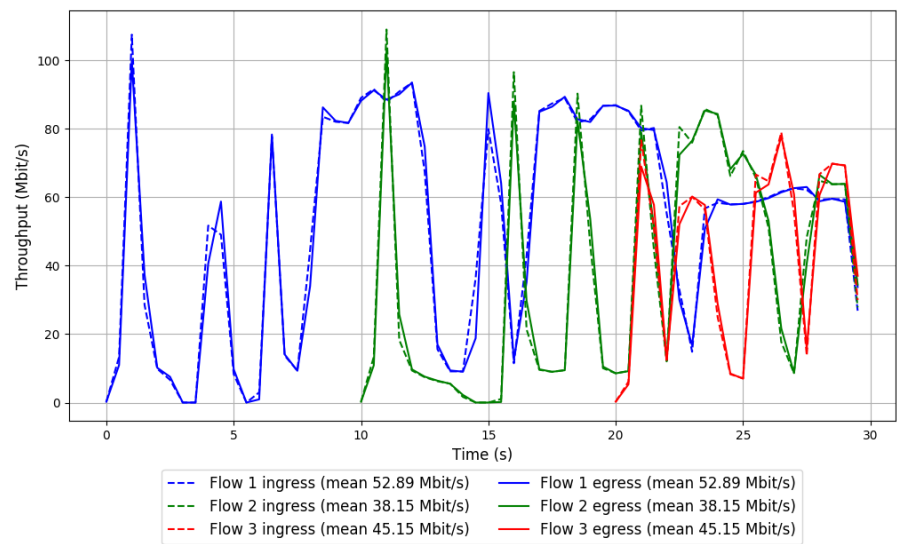
-- Flow 3:

Average throughput: 45.15 Mbit/s

95th percentile per-packet one-way delay: 50.488 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-02-14 09:51:58

End at: 2018-02-14 09:52:28

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 98.17 Mbit/s

95th percentile per-packet one-way delay: 53.757 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 68.44 Mbit/s

95th percentile per-packet one-way delay: 53.558 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 34.13 Mbit/s

95th percentile per-packet one-way delay: 53.870 ms

Loss rate: 0.00%

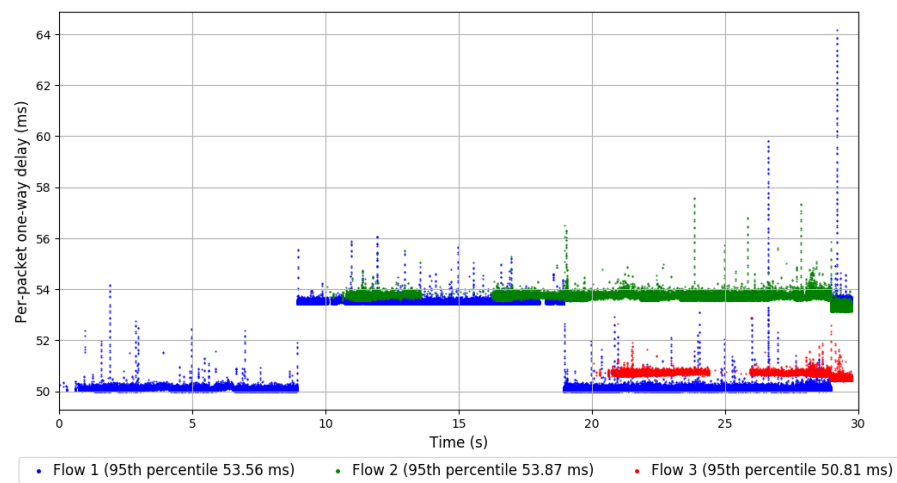
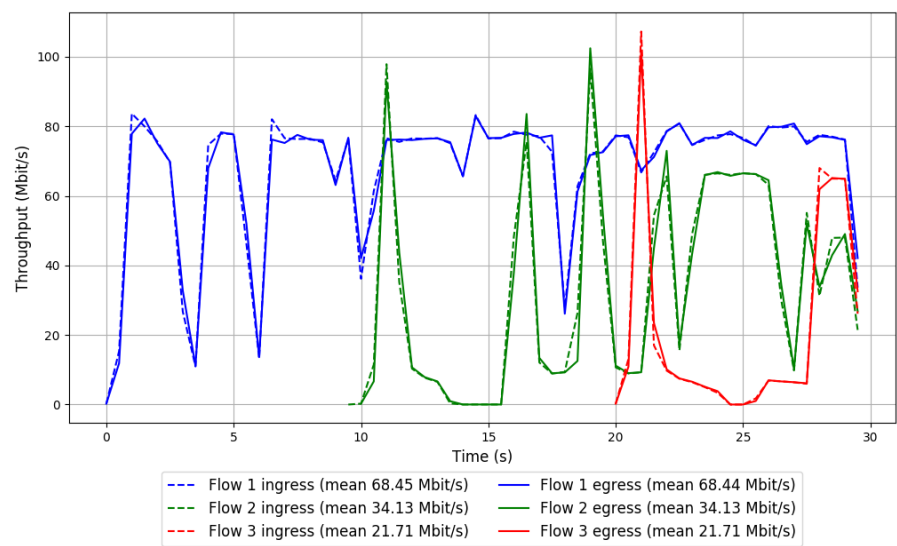
-- Flow 3:

Average throughput: 21.71 Mbit/s

95th percentile per-packet one-way delay: 50.814 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-02-14 10:09:50

End at: 2018-02-14 10:10:20

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.26 Mbit/s

95th percentile per-packet one-way delay: 53.144 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 57.15 Mbit/s

95th percentile per-packet one-way delay: 53.055 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.03 Mbit/s

95th percentile per-packet one-way delay: 53.210 ms

Loss rate: 0.00%

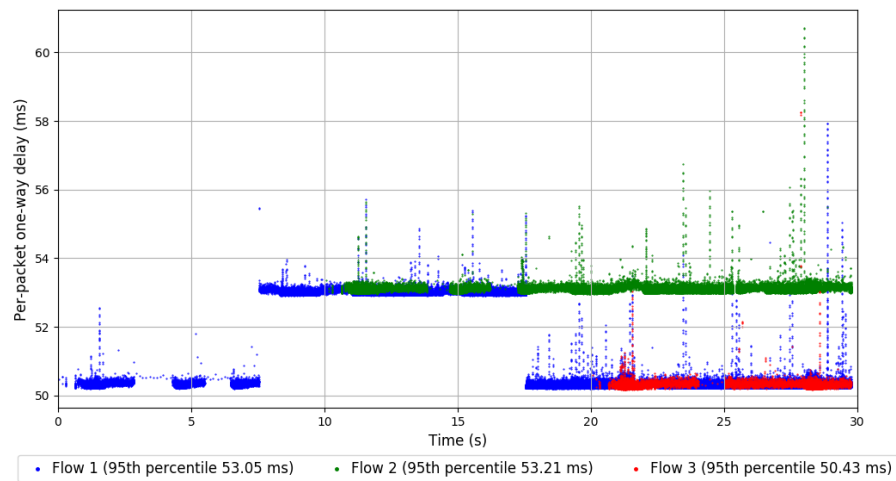
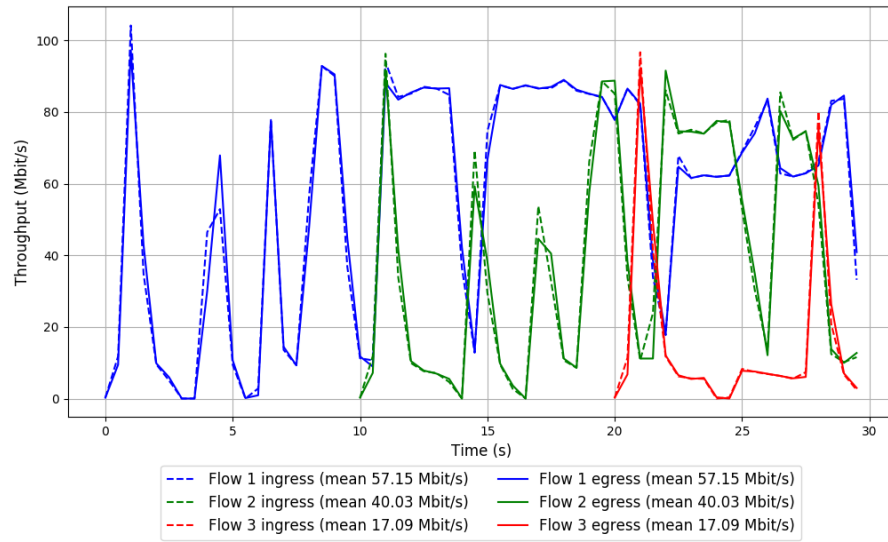
-- Flow 3:

Average throughput: 17.09 Mbit/s

95th percentile per-packet one-way delay: 50.429 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-02-14 10:27:19

End at: 2018-02-14 10:27:49

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.09 Mbit/s

95th percentile per-packet one-way delay: 53.618 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 53.61 Mbit/s

95th percentile per-packet one-way delay: 53.651 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 42.93 Mbit/s

95th percentile per-packet one-way delay: 50.525 ms

Loss rate: 0.00%

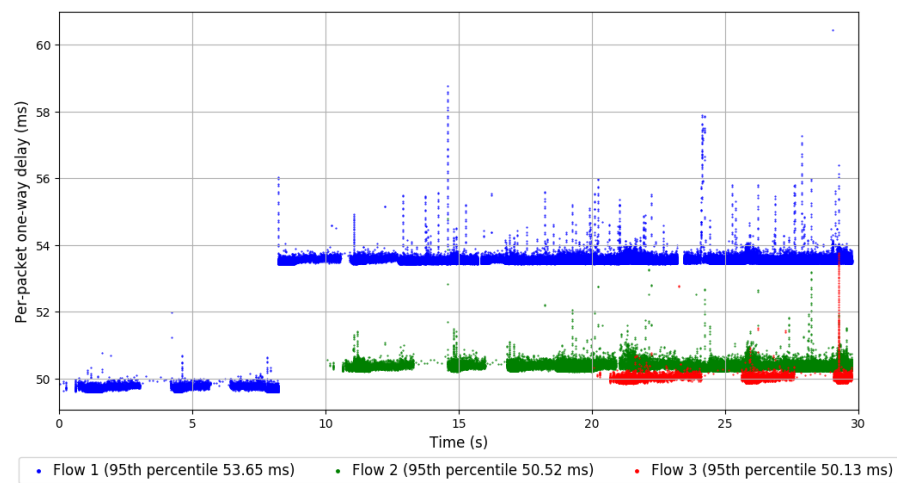
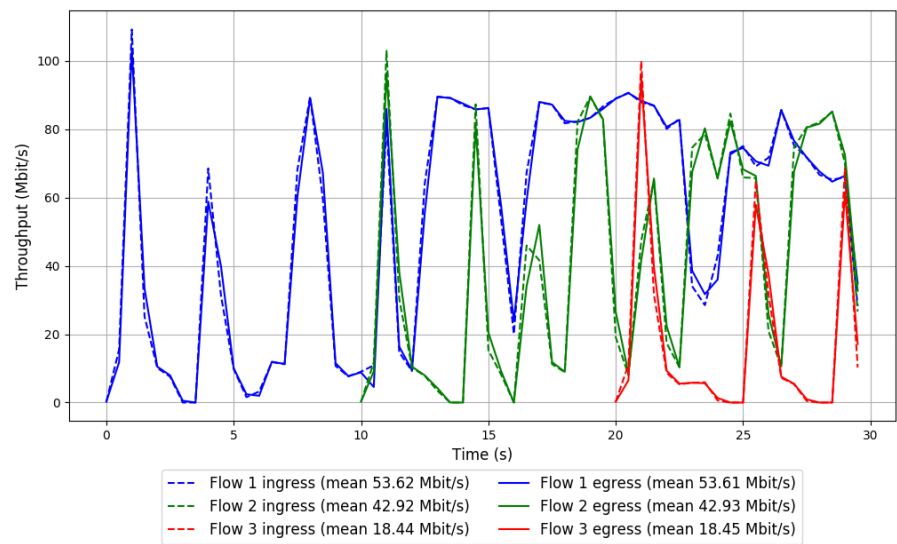
-- Flow 3:

Average throughput: 18.45 Mbit/s

95th percentile per-packet one-way delay: 50.135 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-02-14 10:44:59

End at: 2018-02-14 10:45:29

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.05 Mbit/s

95th percentile per-packet one-way delay: 52.836 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 47.42 Mbit/s

95th percentile per-packet one-way delay: 50.071 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 28.68 Mbit/s

95th percentile per-packet one-way delay: 52.924 ms

Loss rate: 0.00%

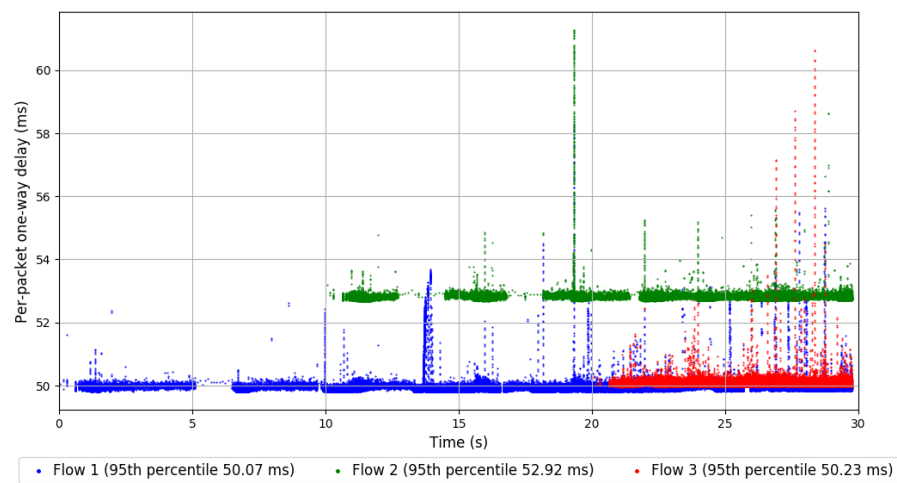
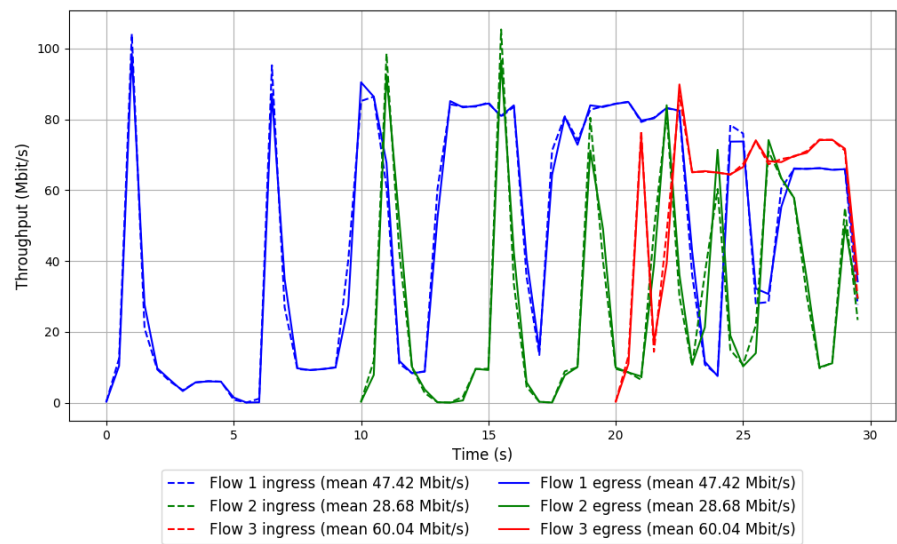
-- Flow 3:

Average throughput: 60.04 Mbit/s

95th percentile per-packet one-way delay: 50.226 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-02-14 11:02:33

End at: 2018-02-14 11:03:03

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.03 Mbit/s

95th percentile per-packet one-way delay: 53.081 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 50.64 Mbit/s

95th percentile per-packet one-way delay: 53.118 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 48.30 Mbit/s

95th percentile per-packet one-way delay: 50.412 ms

Loss rate: 0.00%

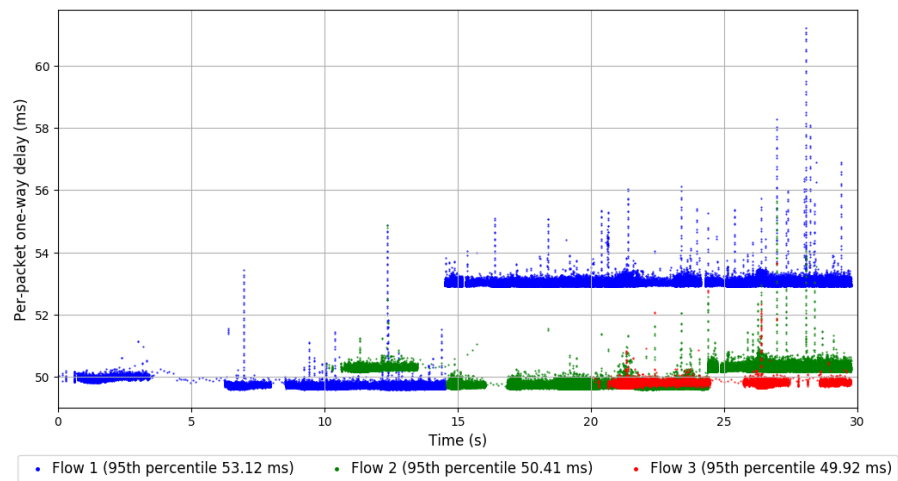
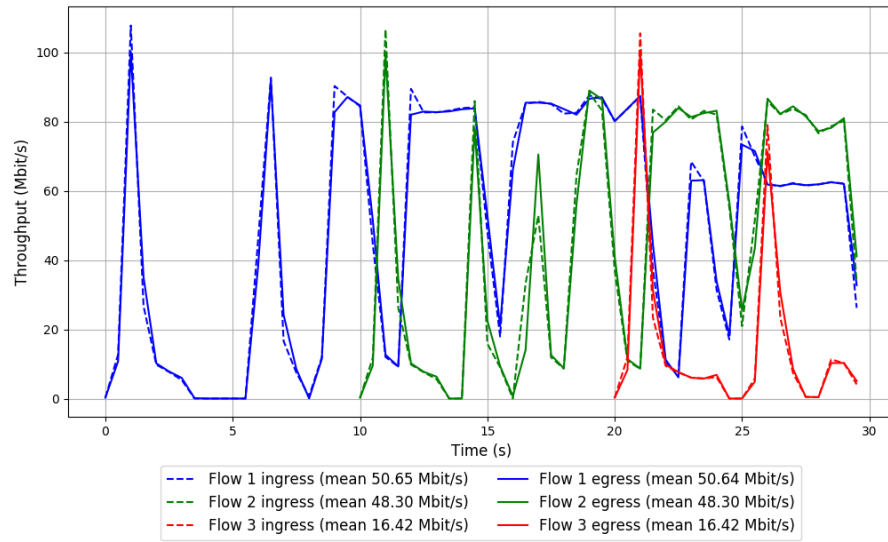
-- Flow 3:

Average throughput: 16.42 Mbit/s

95th percentile per-packet one-way delay: 49.924 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-02-14 11:19:59

End at: 2018-02-14 11:20:29

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.72 Mbit/s

95th percentile per-packet one-way delay: 53.260 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 55.79 Mbit/s

95th percentile per-packet one-way delay: 50.013 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 72.21 Mbit/s

95th percentile per-packet one-way delay: 53.236 ms

Loss rate: 0.00%

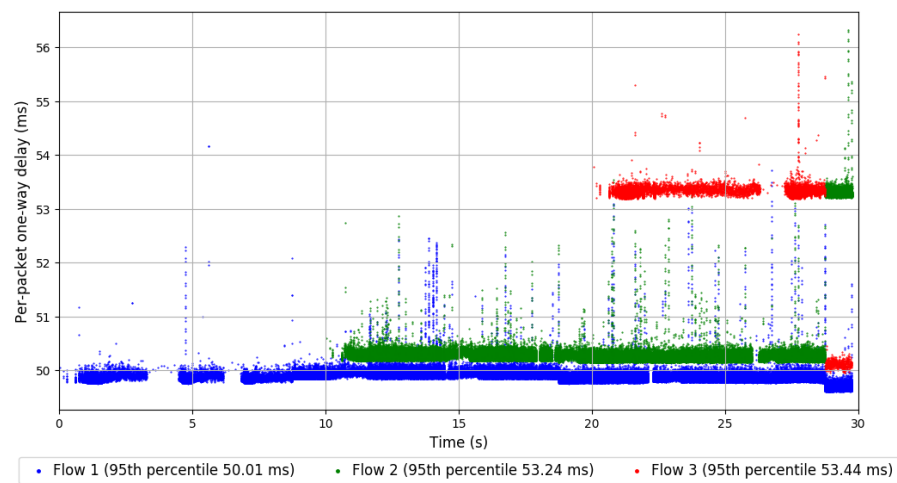
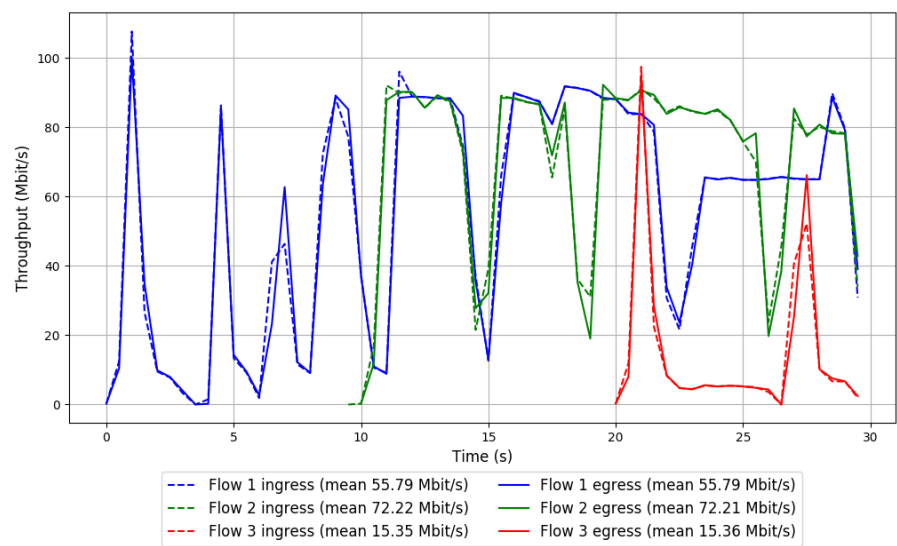
-- Flow 3:

Average throughput: 15.36 Mbit/s

95th percentile per-packet one-way delay: 53.439 ms

Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link

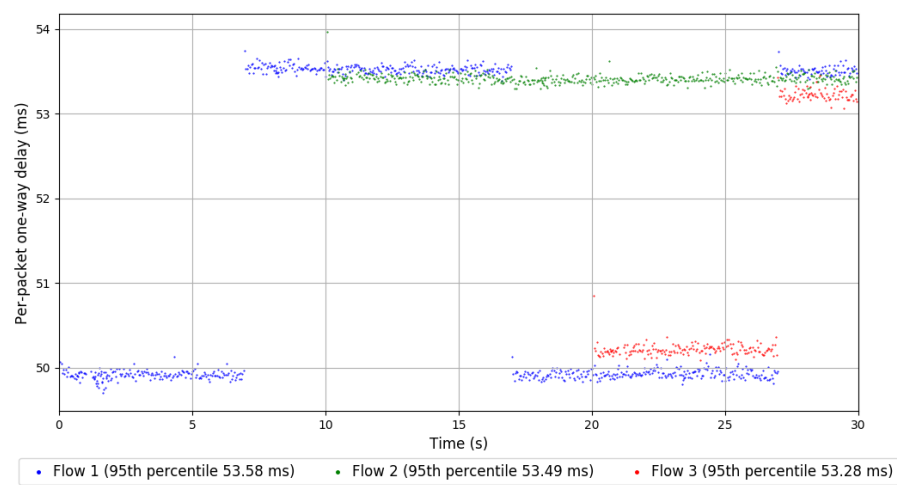
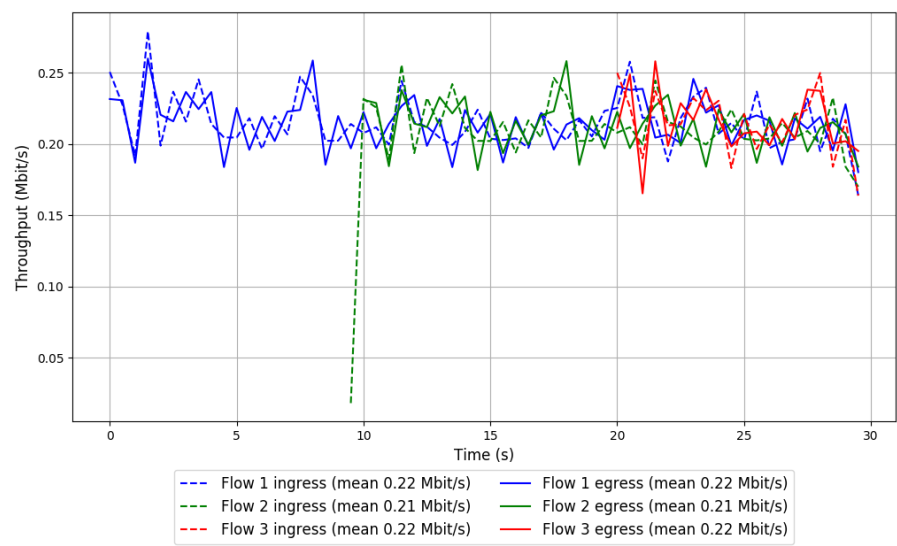


```
Run 1: Statistics of SCReAM

Start at: 2018-02-14 08:38:31
End at: 2018-02-14 08:39:01

# Below is generated by plot.py at 2018-02-14 14:24:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.555 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.575 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.493 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.282 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

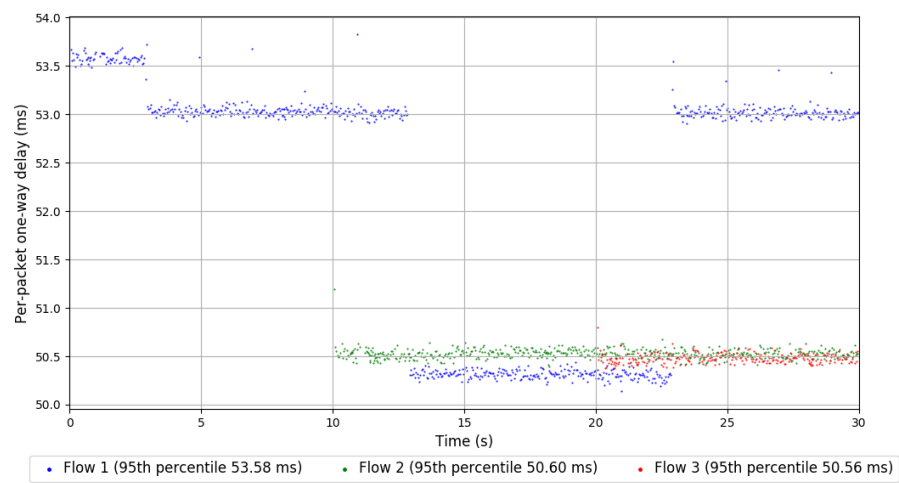
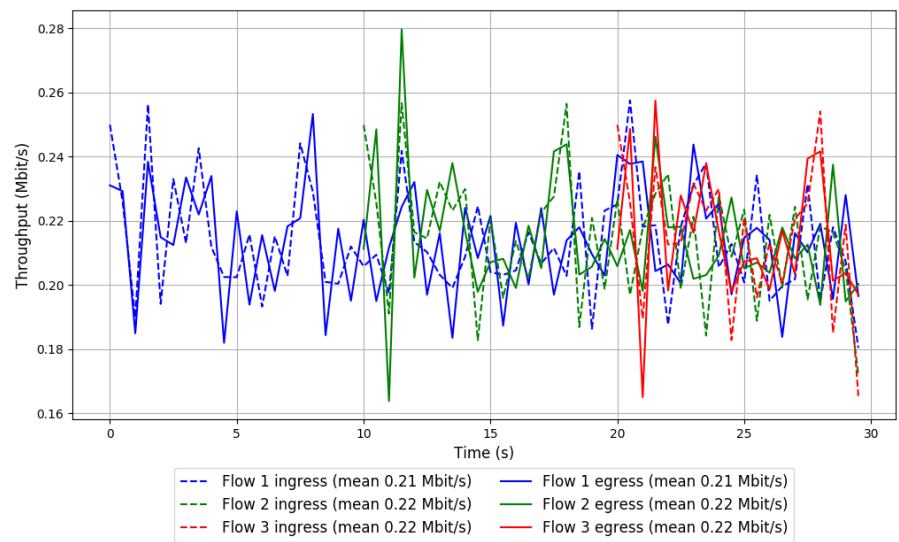


```
Run 2: Statistics of SCReAM

Start at: 2018-02-14 08:55:55
End at: 2018-02-14 08:56:25

# Below is generated by plot.py at 2018-02-14 14:24:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.487 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.581 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.602 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.557 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link

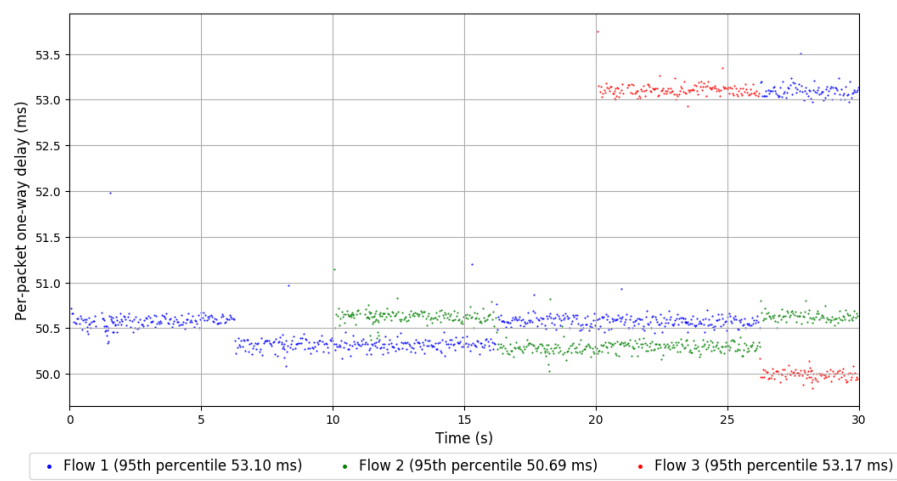
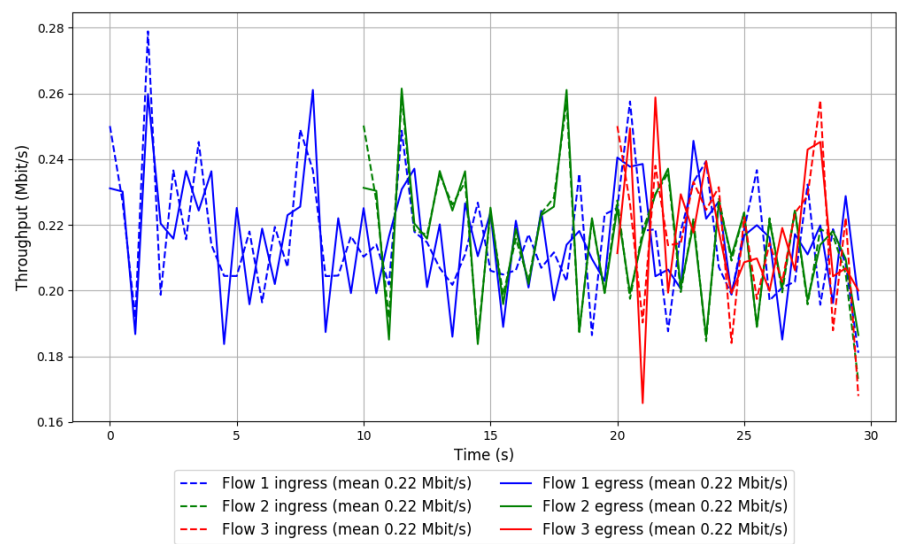


```
Run 3: Statistics of SCReAM

Start at: 2018-02-14 09:13:21
End at: 2018-02-14 09:13:51

# Below is generated by plot.py at 2018-02-14 14:24:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.126 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.100 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.690 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.169 ms
Loss rate: 0.00%
```


Run 3: Report of SReAM — Data Link

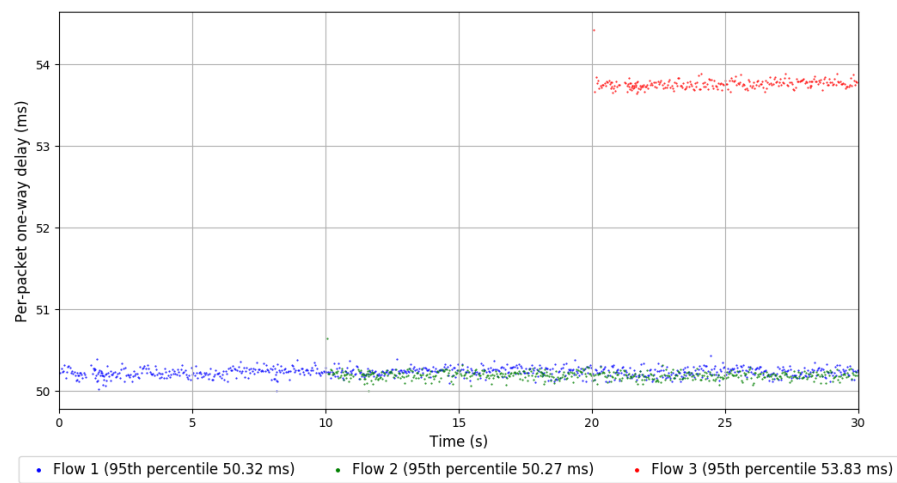
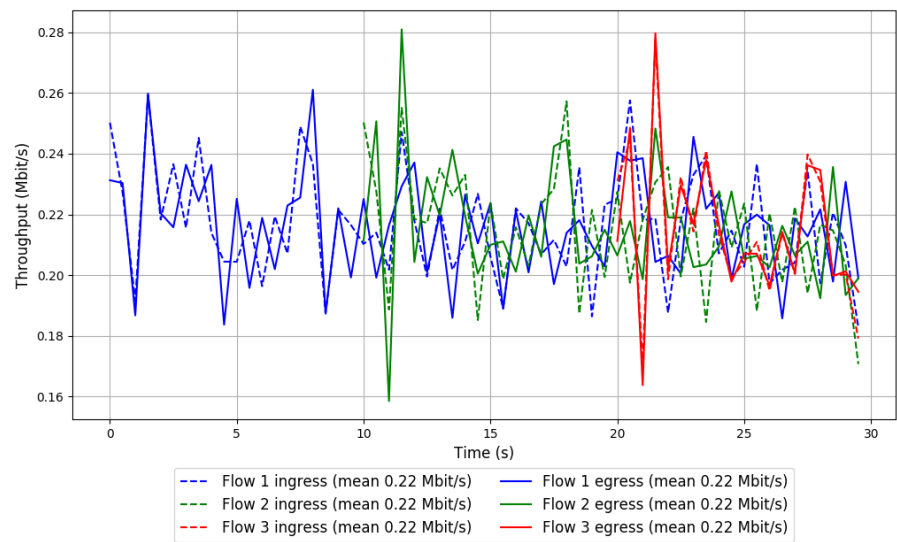


```
Run 4: Statistics of SReAM

Start at: 2018-02-14 09:31:05
End at: 2018-02-14 09:31:35

# Below is generated by plot.py at 2018-02-14 14:24:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.780 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.319 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.267 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.834 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-02-14 09:48:15

End at: 2018-02-14 09:48:45

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.847 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.870 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 50.875 ms

Loss rate: 0.00%

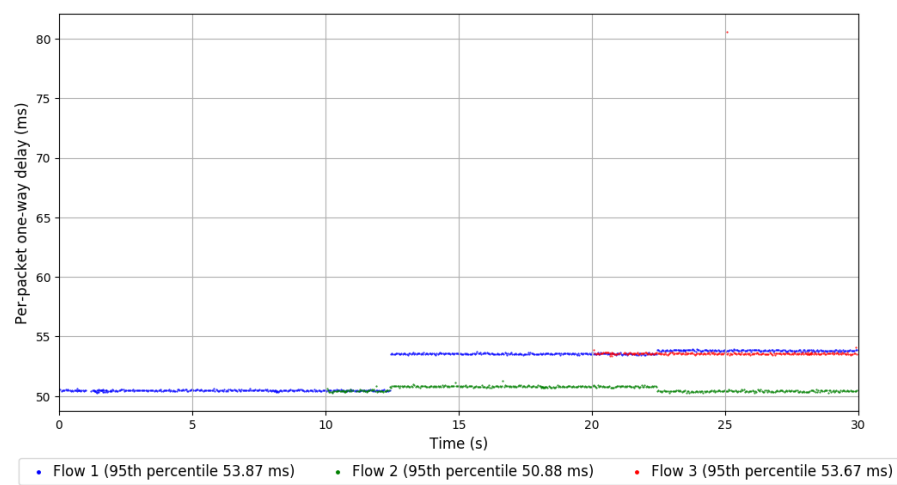
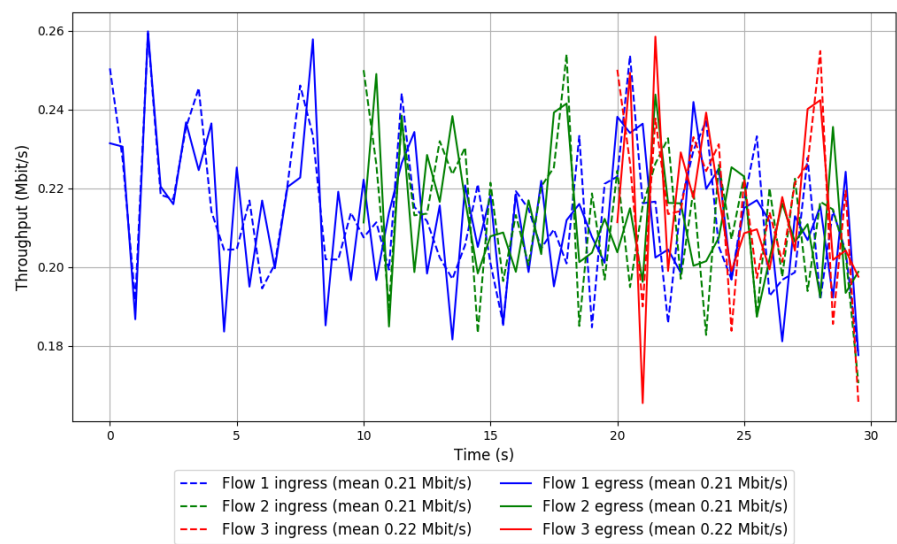
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.666 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-02-14 10:06:10

End at: 2018-02-14 10:06:40

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.593 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.609 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.316 ms

Loss rate: 0.00%

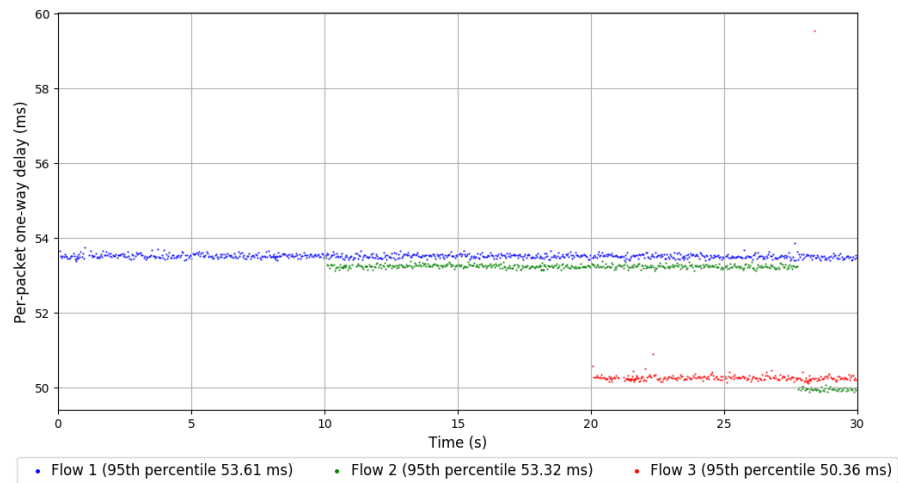
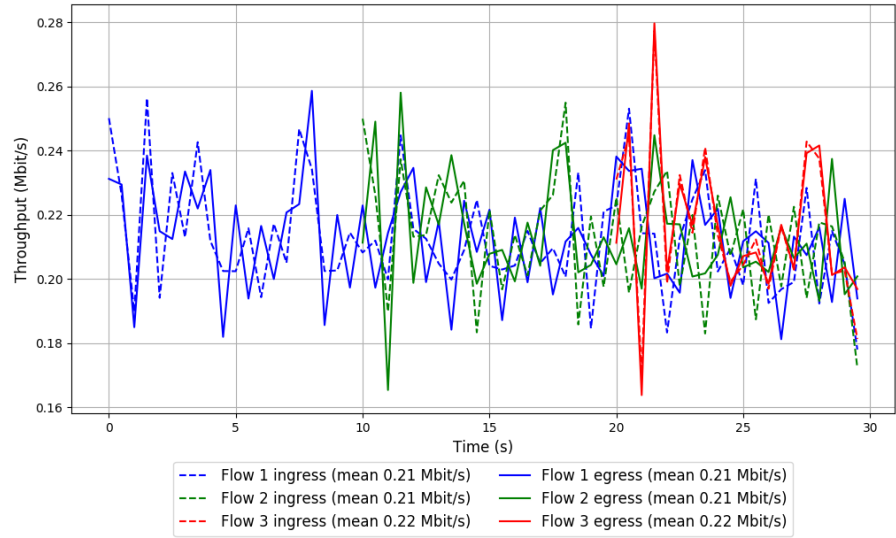
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.357 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link

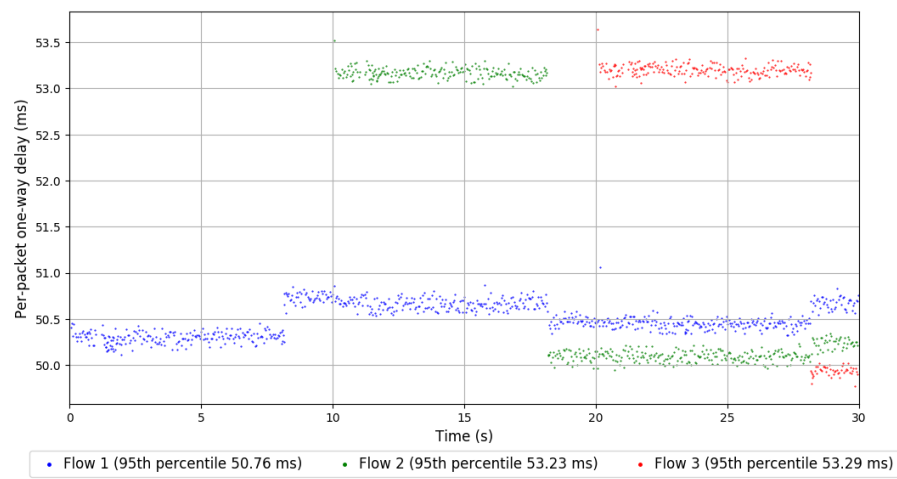
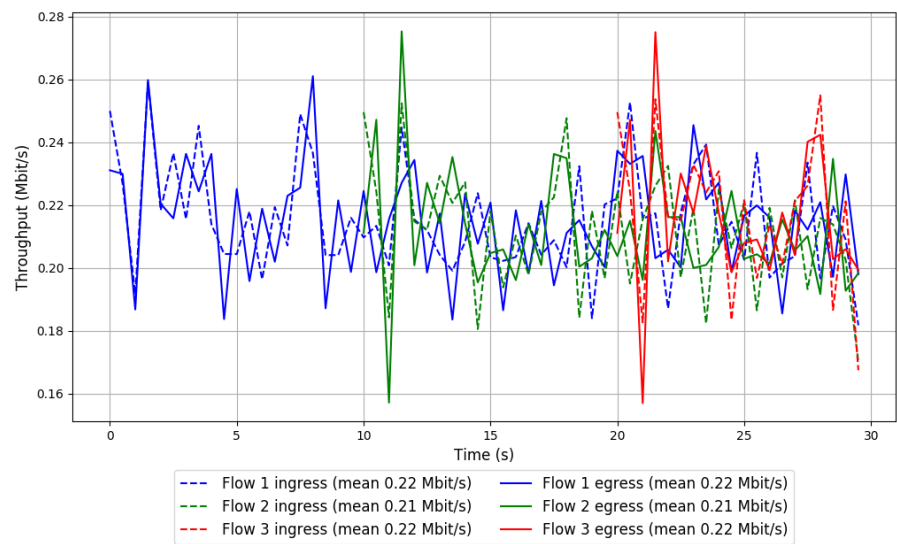


```
Run 7: Statistics of SReAM

Start at: 2018-02-14 10:23:39
End at: 2018-02-14 10:24:09

# Below is generated by plot.py at 2018-02-14 14:24:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.237 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.759 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.229 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.290 ms
Loss rate: 0.00%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2018-02-14 10:41:19

End at: 2018-02-14 10:41:49

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.546 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 50.348 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.607 ms

Loss rate: 0.00%

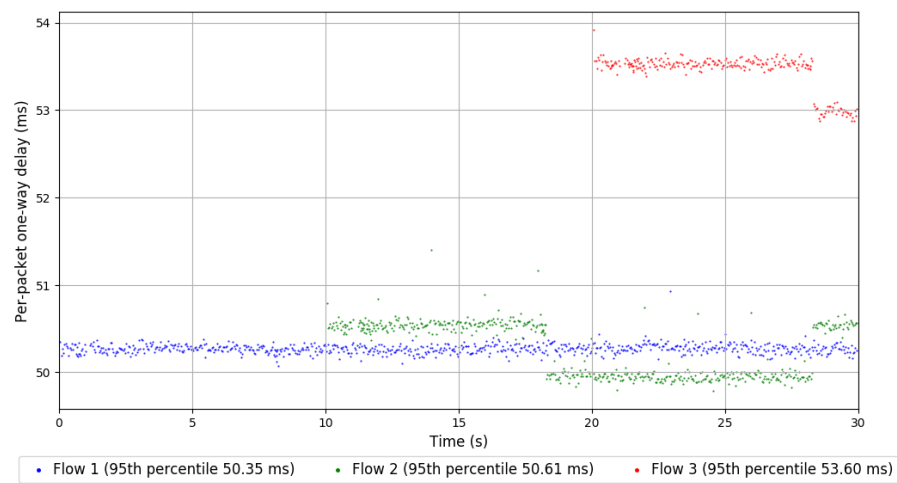
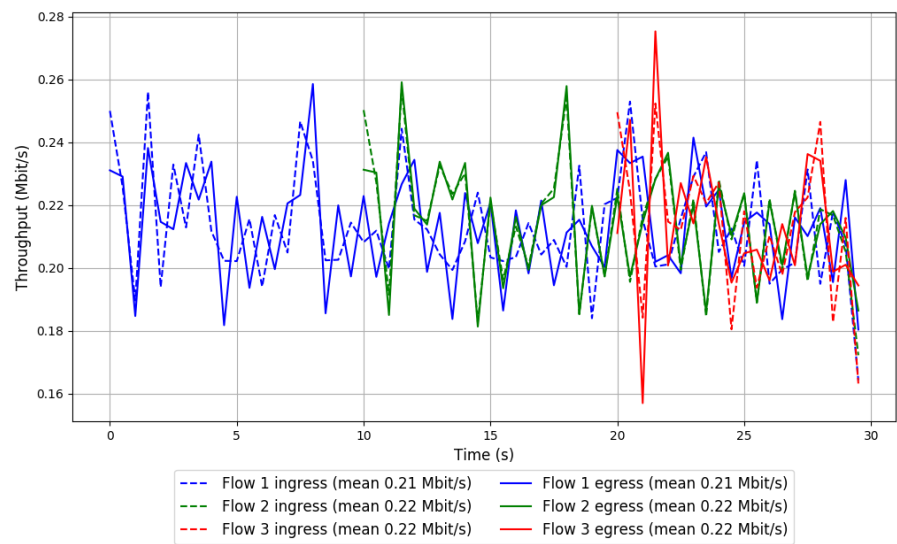
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.603 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-02-14 10:58:52

End at: 2018-02-14 10:59:22

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.628 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.648 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.535 ms

Loss rate: 0.00%

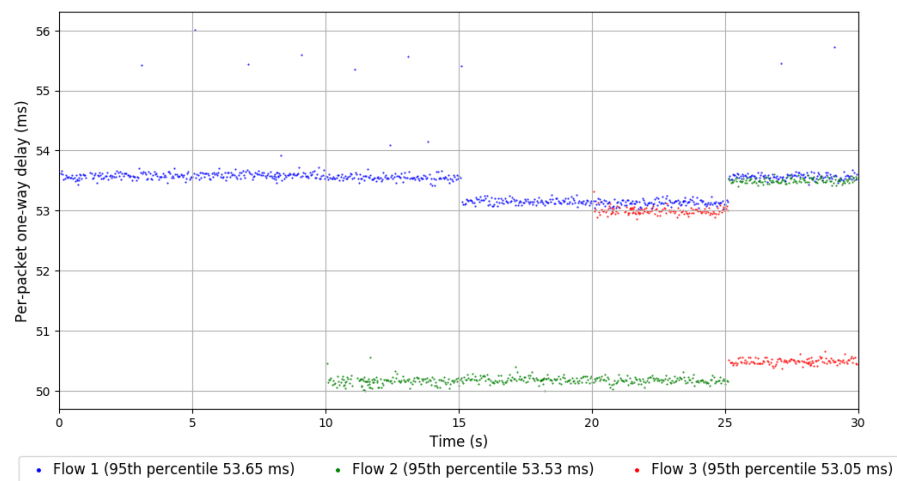
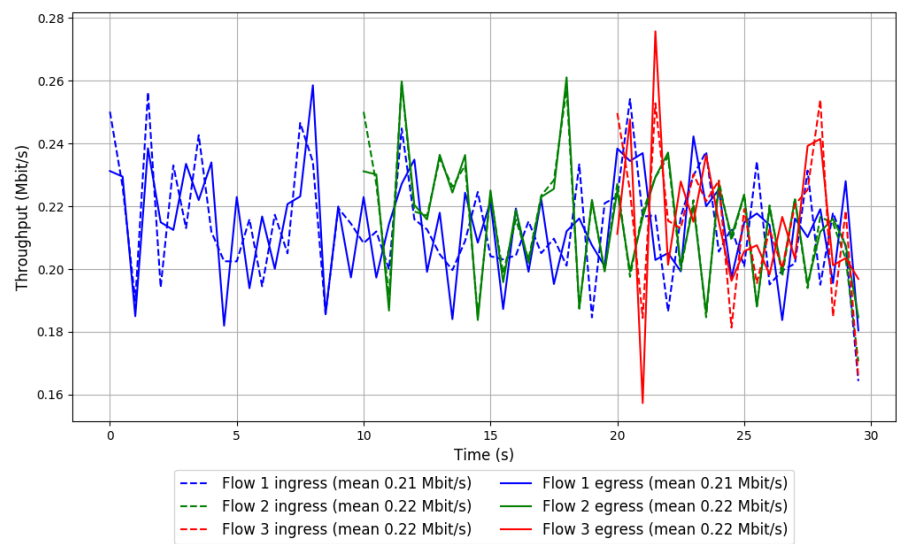
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.050 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

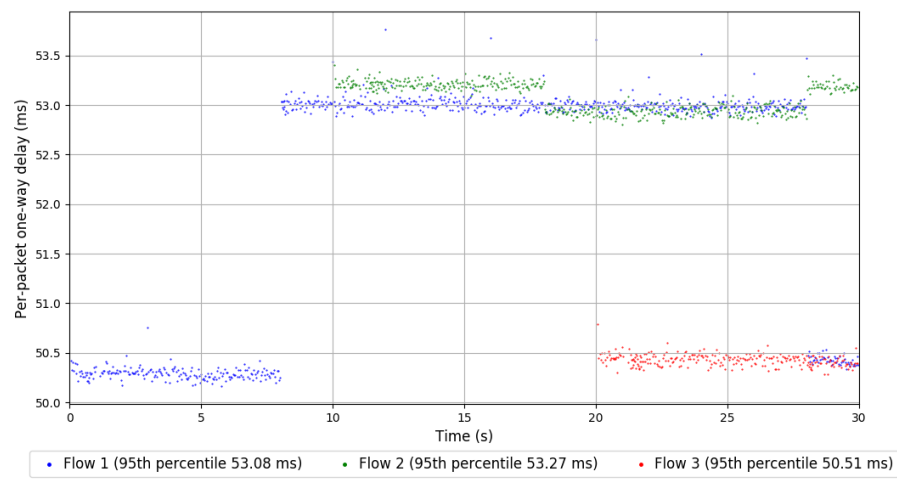
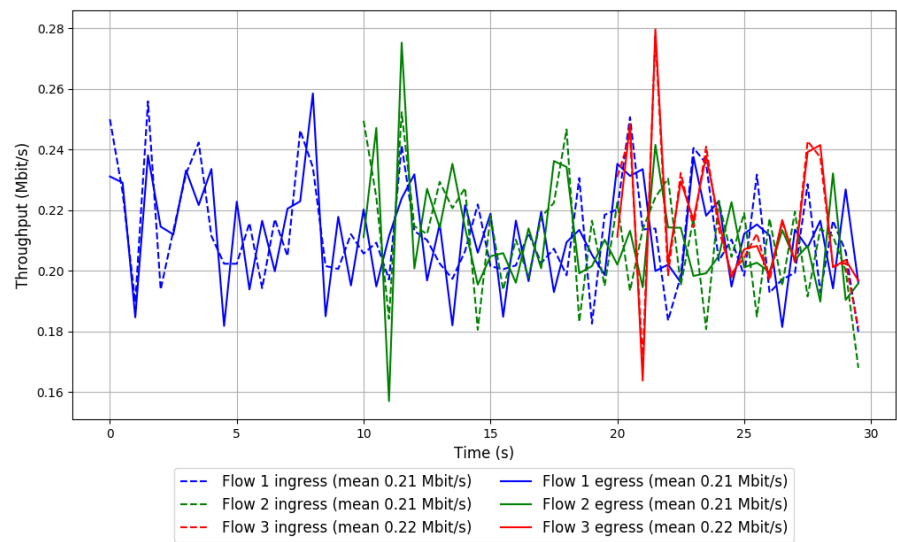


```
Run 10: Statistics of SCReAM

Start at: 2018-02-14 11:16:20
End at: 2018-02-14 11:16:50

# Below is generated by plot.py at 2018-02-14 14:24:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.235 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.081 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.269 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.513 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

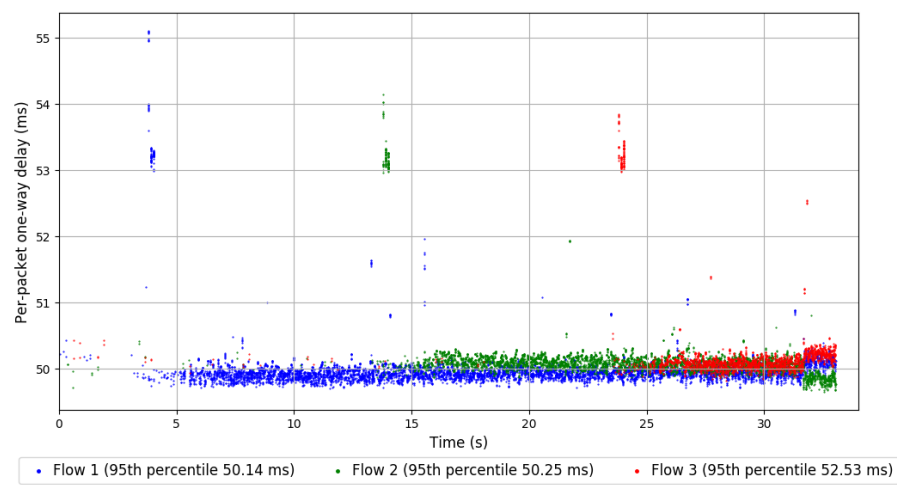
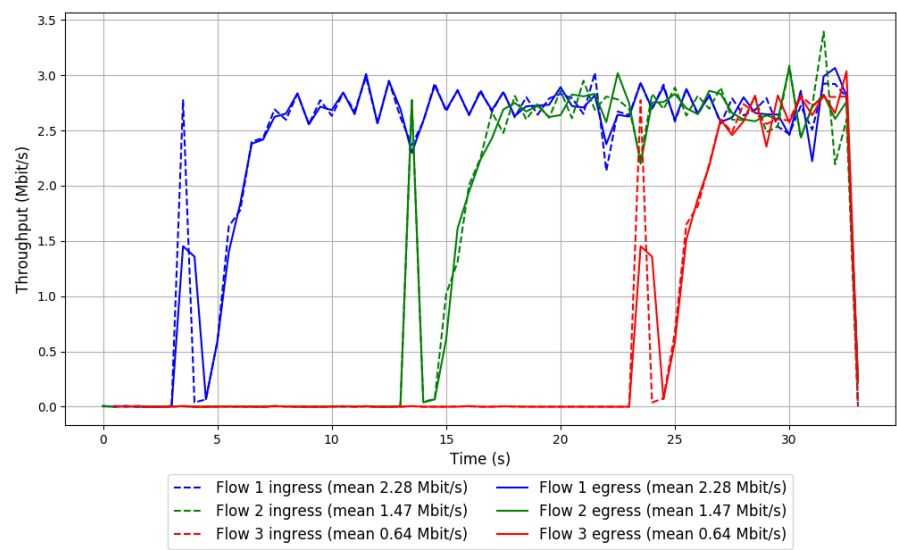


```
Run 1: Statistics of WebRTC media

Start at: 2018-02-14 08:41:29
End at: 2018-02-14 08:41:59

# Below is generated by plot.py at 2018-02-14 14:24:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.36 Mbit/s
95th percentile per-packet one-way delay: 50.245 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 50.141 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 50.246 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 52.534 ms
Loss rate: 0.01%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-02-14 08:58:53

End at: 2018-02-14 08:59:23

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 53.757 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.641 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 53.813 ms

Loss rate: 0.02%

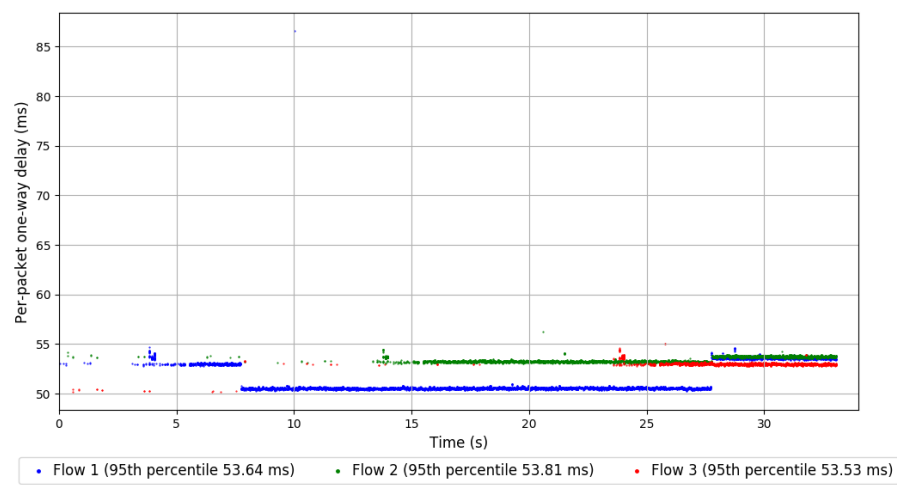
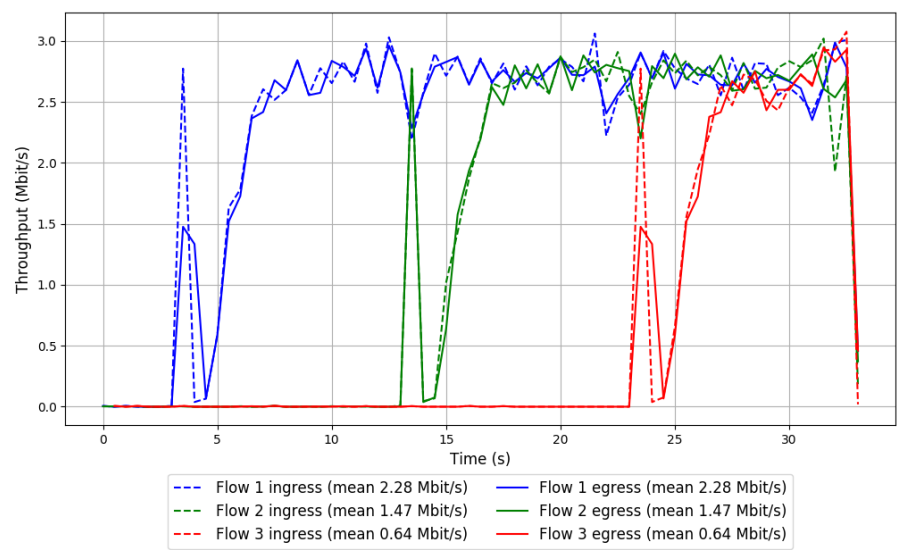
-- Flow 3:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 53.527 ms

Loss rate: 0.05%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-02-14 09:16:23

End at: 2018-02-14 09:16:53

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.40 Mbit/s

95th percentile per-packet one-way delay: 53.775 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 53.794 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 53.707 ms

Loss rate: 0.00%

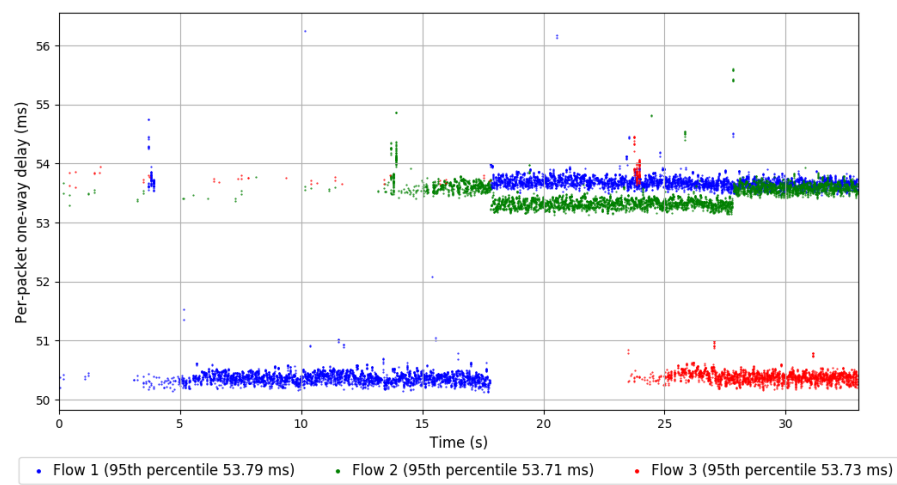
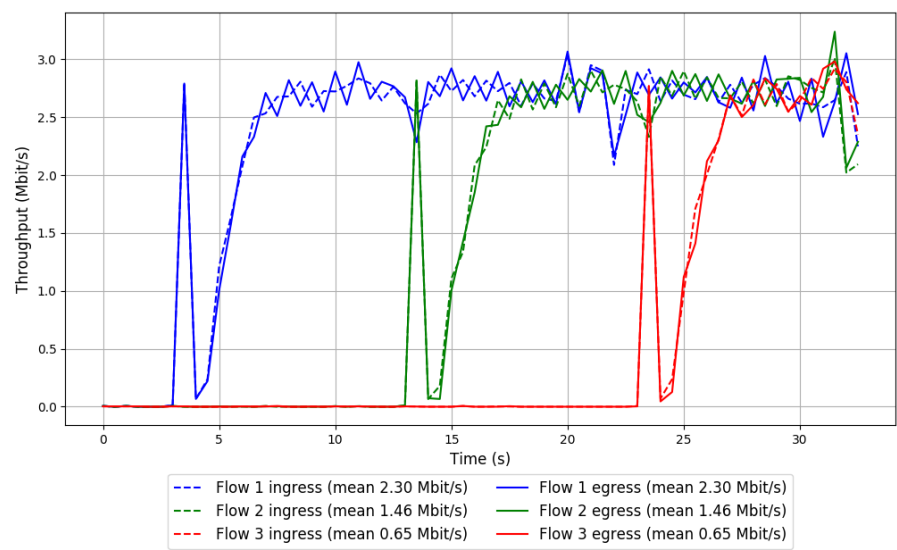
-- Flow 3:

Average throughput: 0.65 Mbit/s

95th percentile per-packet one-way delay: 53.735 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-02-14 09:34:06

End at: 2018-02-14 09:34:36

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.35 Mbit/s

95th percentile per-packet one-way delay: 53.991 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 54.016 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 53.631 ms

Loss rate: 0.00%

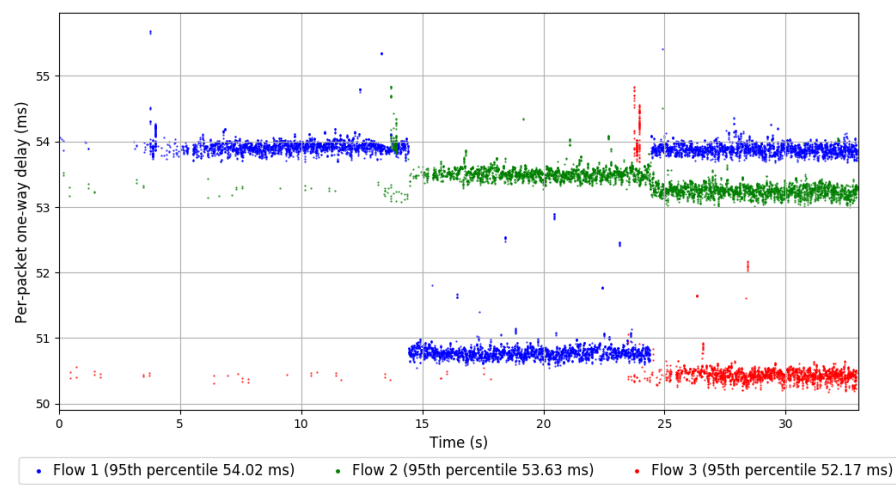
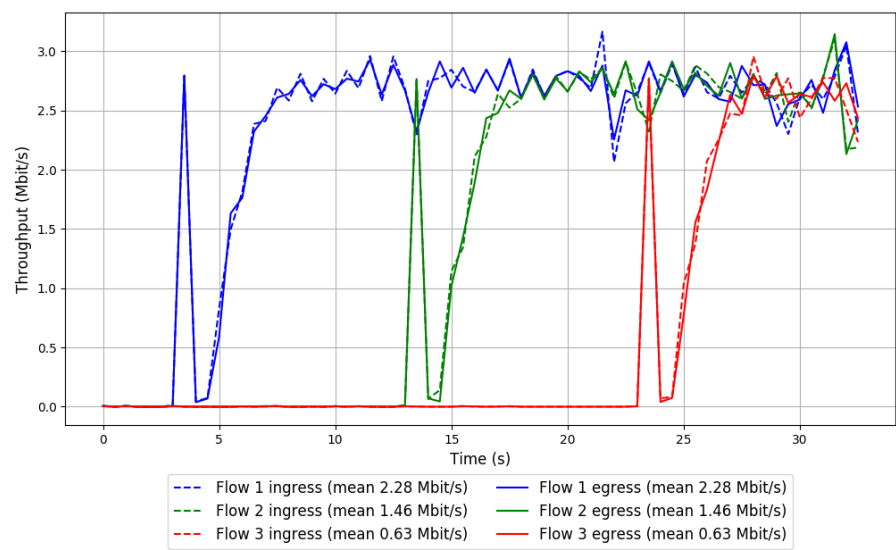
-- Flow 3:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 52.167 ms

Loss rate: 0.05%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-02-14 09:51:19

End at: 2018-02-14 09:51:49

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.36 Mbit/s

95th percentile per-packet one-way delay: 53.804 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.831 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 53.756 ms

Loss rate: 0.00%

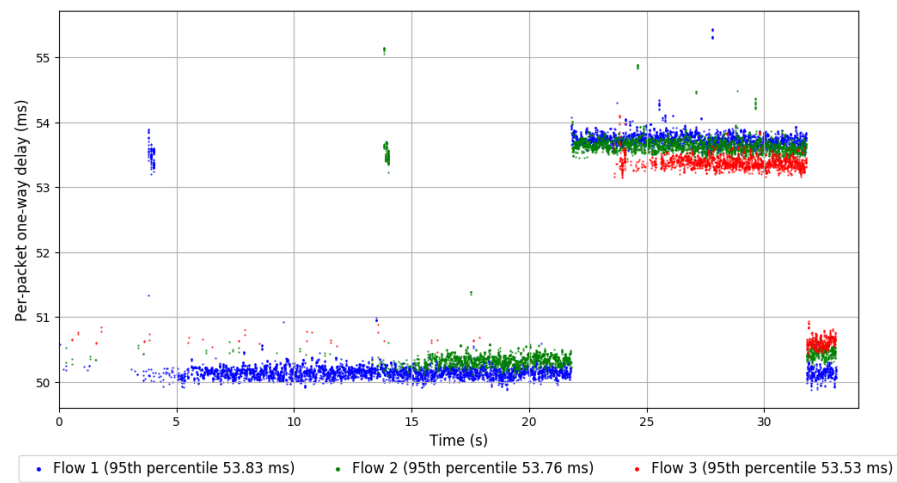
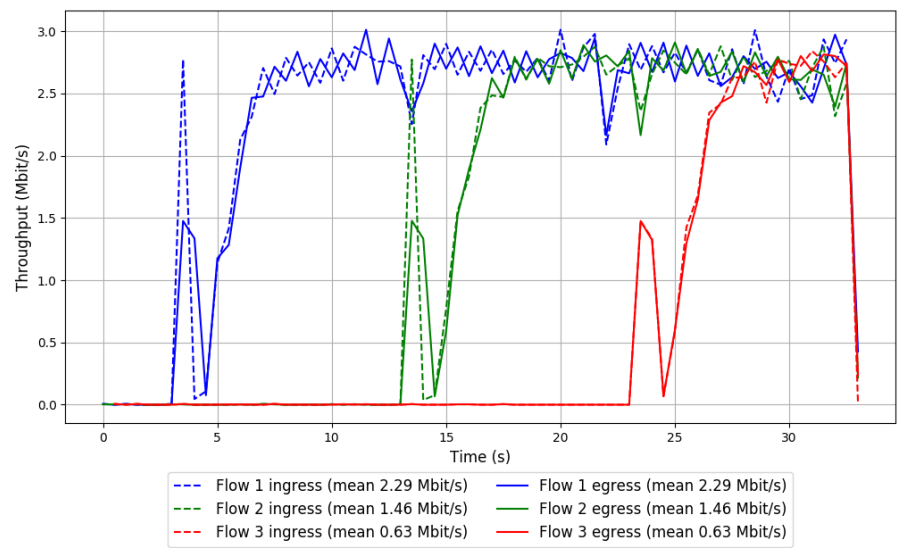
-- Flow 3:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 53.535 ms

Loss rate: 0.04%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-02-14 10:09:10

End at: 2018-02-14 10:09:40

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 53.662 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 50.129 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 53.634 ms

Loss rate: 0.00%

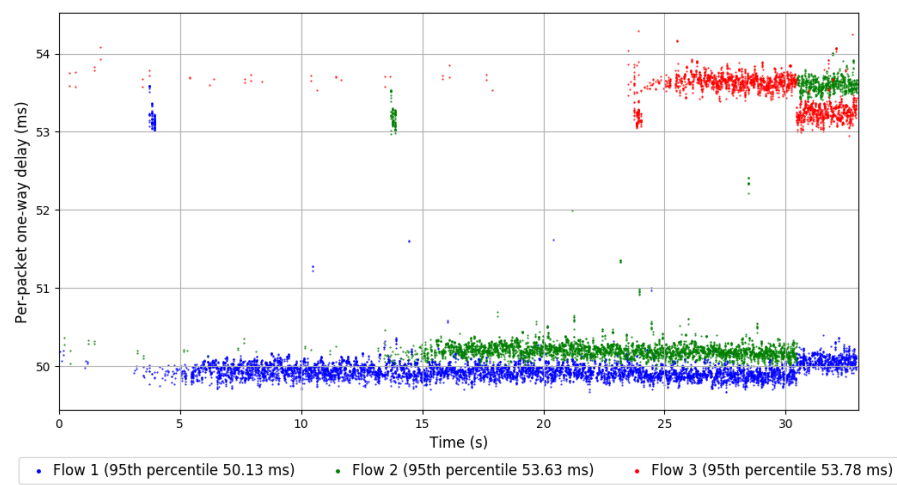
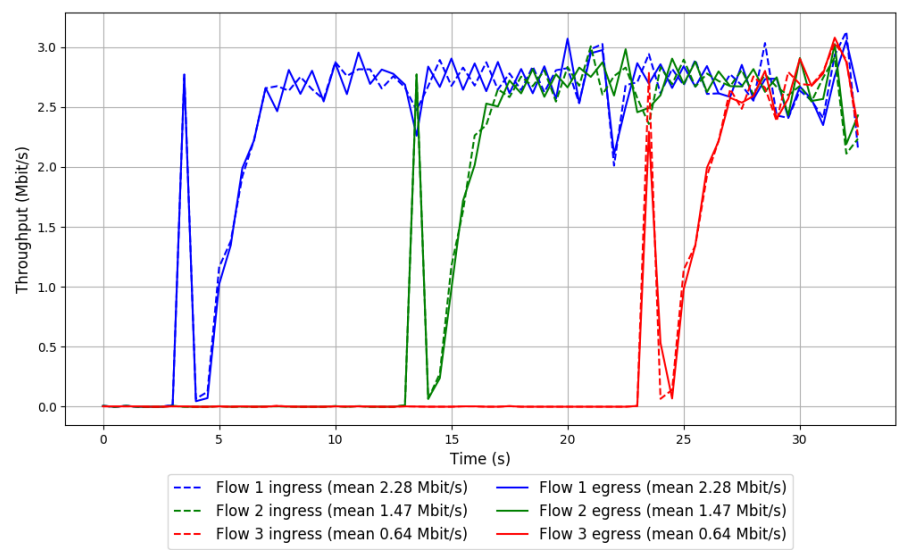
-- Flow 3:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 53.784 ms

Loss rate: 0.36%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-02-14 10:26:40

End at: 2018-02-14 10:27:10

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.34 Mbit/s

95th percentile per-packet one-way delay: 53.672 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.698 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.45 Mbit/s

95th percentile per-packet one-way delay: 53.416 ms

Loss rate: 0.00%

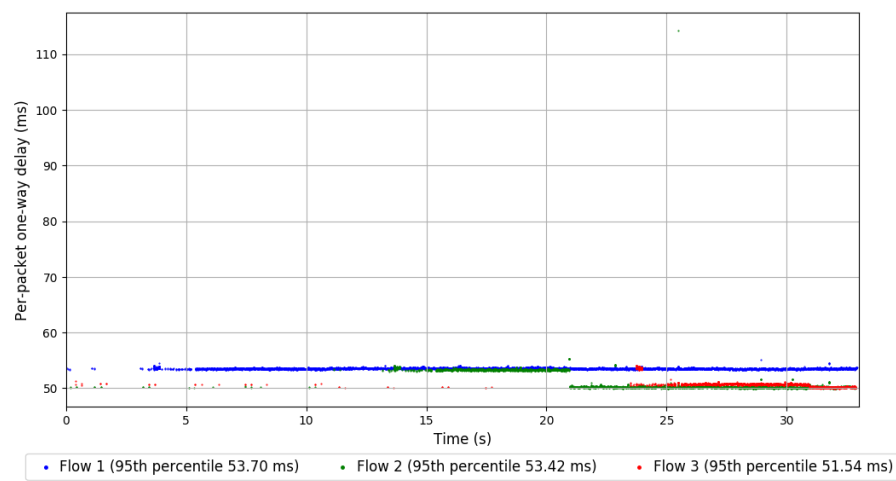
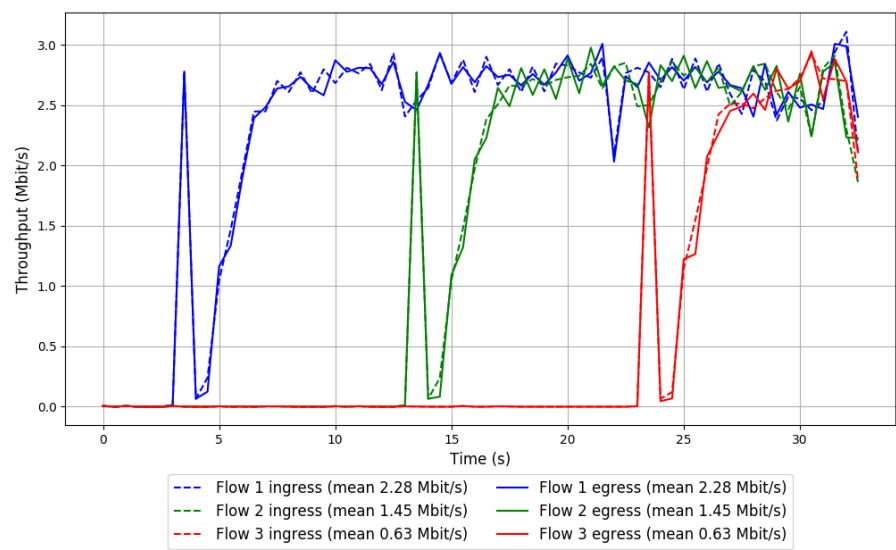
-- Flow 3:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 51.536 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-02-14 10:44:20

End at: 2018-02-14 10:44:50

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.36 Mbit/s

95th percentile per-packet one-way delay: 53.615 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.576 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 53.607 ms

Loss rate: 0.00%

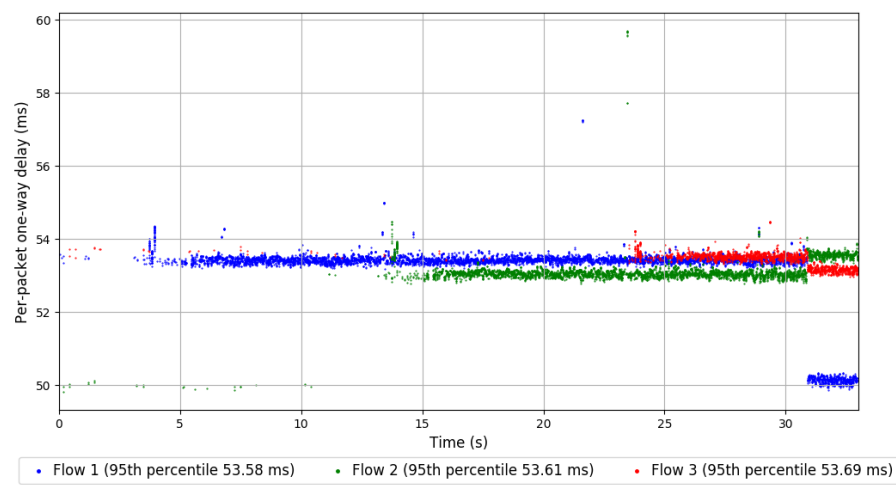
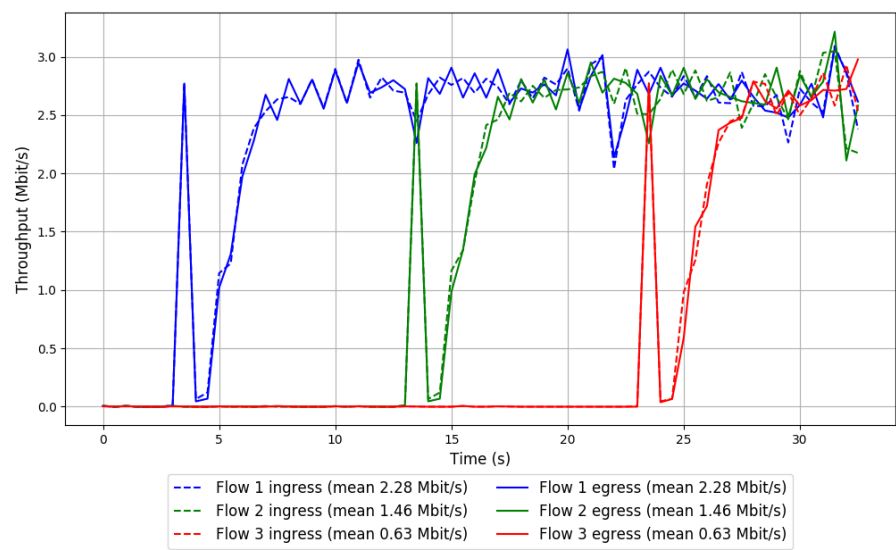
-- Flow 3:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 53.685 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-02-14 11:01:53

End at: 2018-02-14 11:02:24

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.34 Mbit/s

95th percentile per-packet one-way delay: 53.461 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 53.127 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 53.602 ms

Loss rate: 0.00%

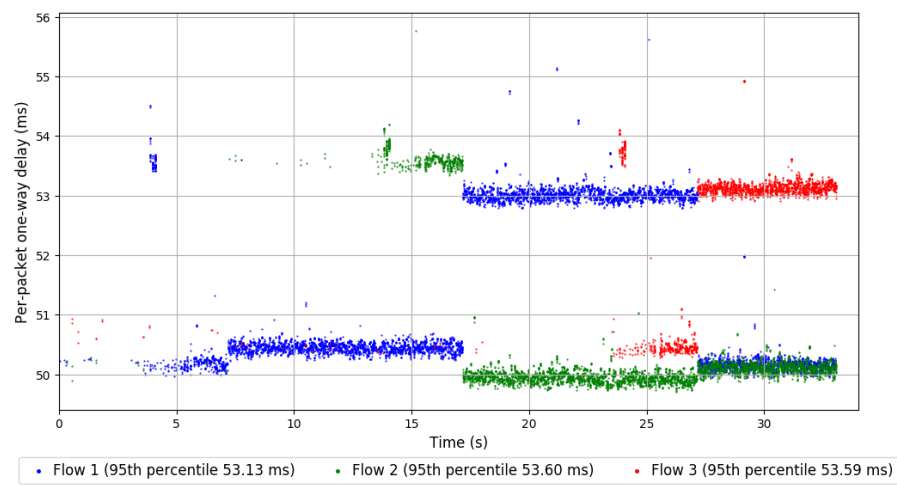
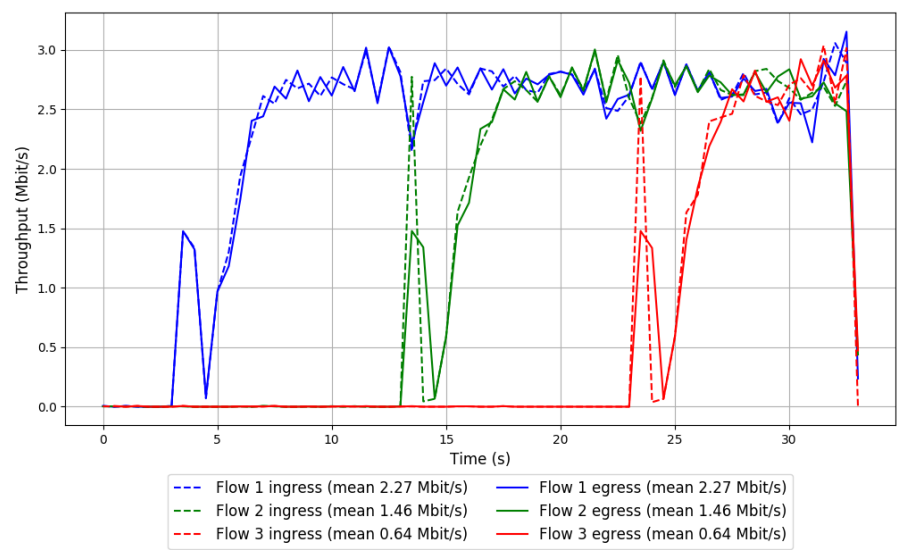
-- Flow 3:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 53.585 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-02-14 11:19:19

End at: 2018-02-14 11:19:49

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 53.646 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.671 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 50.038 ms

Loss rate: 0.00%

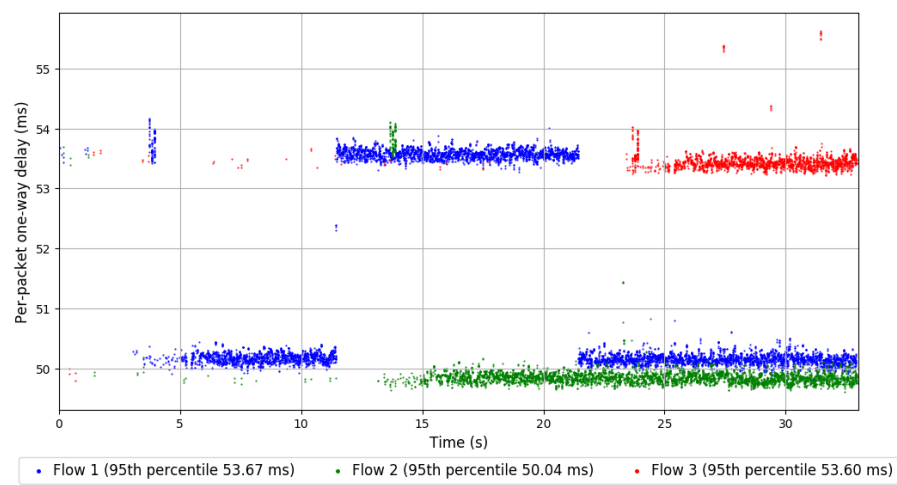
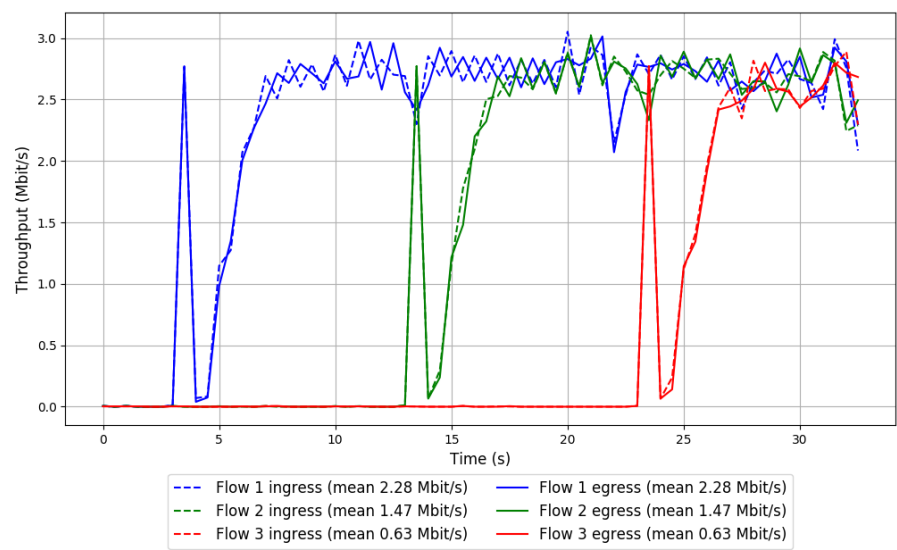
-- Flow 3:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 53.601 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-02-14 08:36:00

End at: 2018-02-14 08:36:30

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.33 Mbit/s

95th percentile per-packet one-way delay: 54.271 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 54.295 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.62 Mbit/s

95th percentile per-packet one-way delay: 54.273 ms

Loss rate: 0.00%

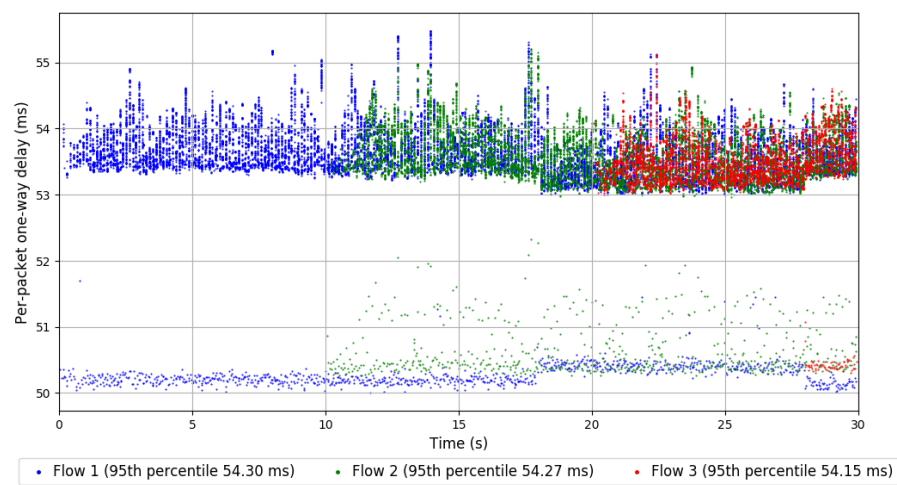
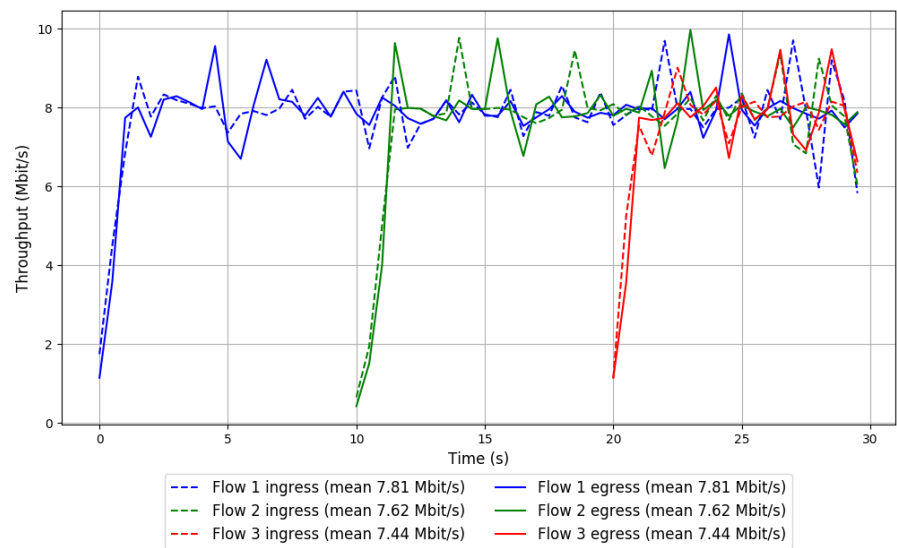
-- Flow 3:

Average throughput: 7.44 Mbit/s

95th percentile per-packet one-way delay: 54.149 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-02-14 08:53:23

End at: 2018-02-14 08:53:53

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.33 Mbit/s

95th percentile per-packet one-way delay: 54.485 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 7.83 Mbit/s

95th percentile per-packet one-way delay: 54.459 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 7.54 Mbit/s

95th percentile per-packet one-way delay: 54.489 ms

Loss rate: 0.47%

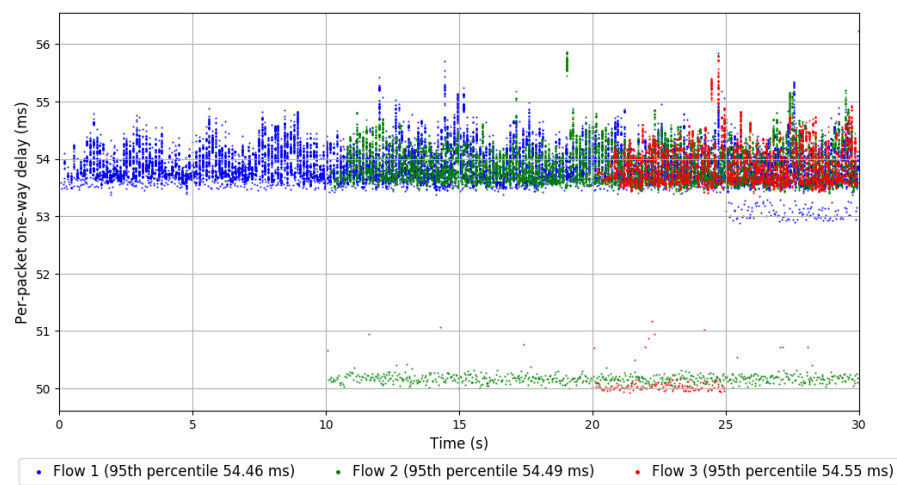
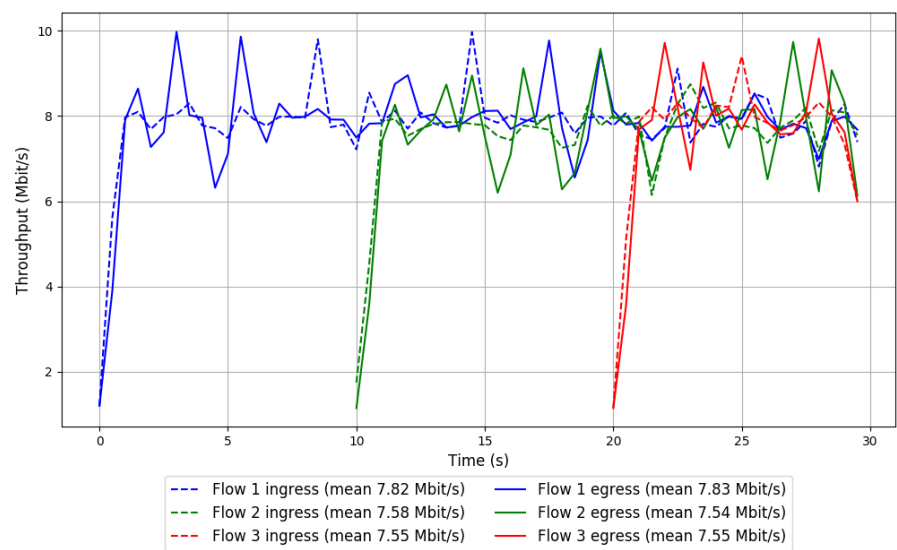
-- Flow 3:

Average throughput: 7.55 Mbit/s

95th percentile per-packet one-way delay: 54.545 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-02-14 09:10:52

End at: 2018-02-14 09:11:22

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.23 Mbit/s

95th percentile per-packet one-way delay: 54.465 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 54.503 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 7.61 Mbit/s

95th percentile per-packet one-way delay: 54.427 ms

Loss rate: 0.03%

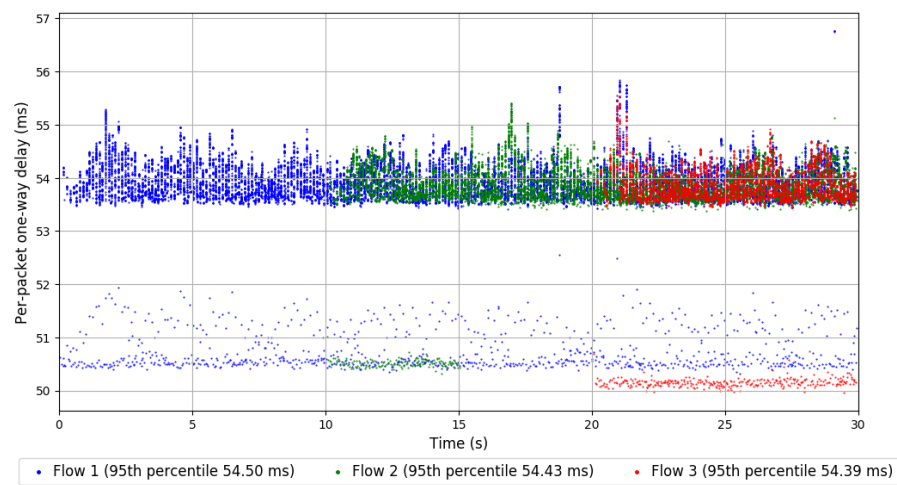
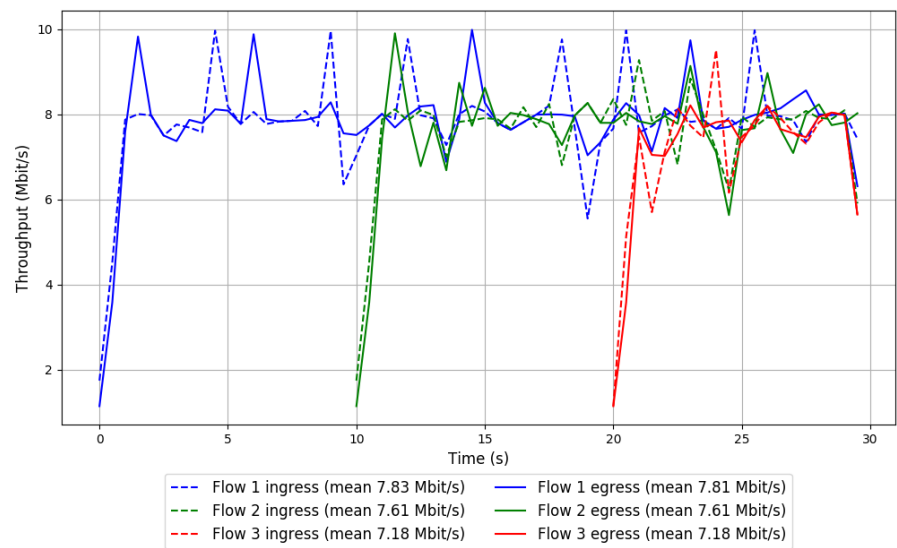
-- Flow 3:

Average throughput: 7.18 Mbit/s

95th percentile per-packet one-way delay: 54.393 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-02-14 09:28:33

End at: 2018-02-14 09:29:03

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.19 Mbit/s

95th percentile per-packet one-way delay: 54.732 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 7.61 Mbit/s

95th percentile per-packet one-way delay: 54.730 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 7.68 Mbit/s

95th percentile per-packet one-way delay: 54.686 ms

Loss rate: 0.00%

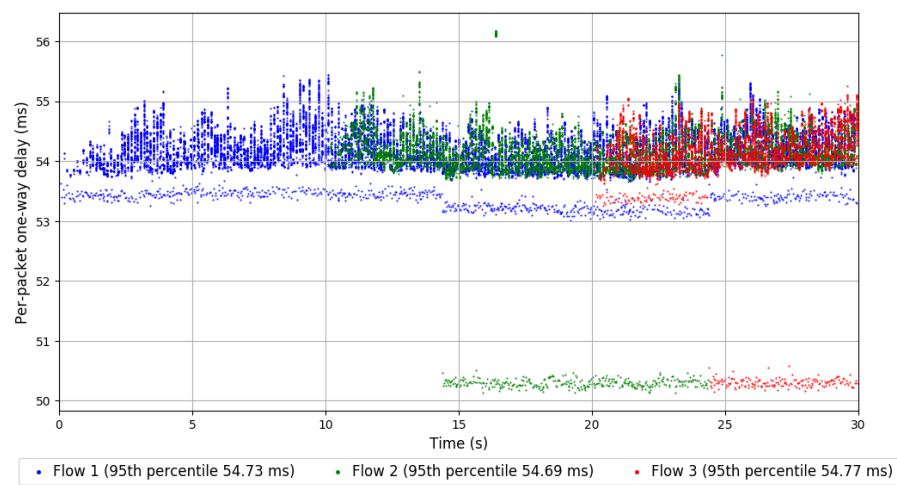
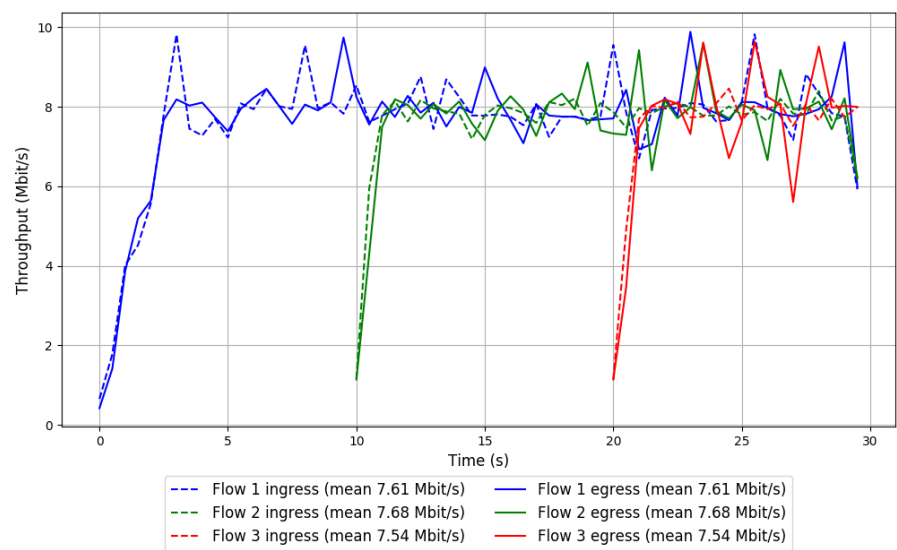
-- Flow 3:

Average throughput: 7.54 Mbit/s

95th percentile per-packet one-way delay: 54.770 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-02-14 09:45:47

End at: 2018-02-14 09:46:17

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.25 Mbit/s

95th percentile per-packet one-way delay: 54.863 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.78 Mbit/s

95th percentile per-packet one-way delay: 54.837 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.58 Mbit/s

95th percentile per-packet one-way delay: 54.820 ms

Loss rate: 0.00%

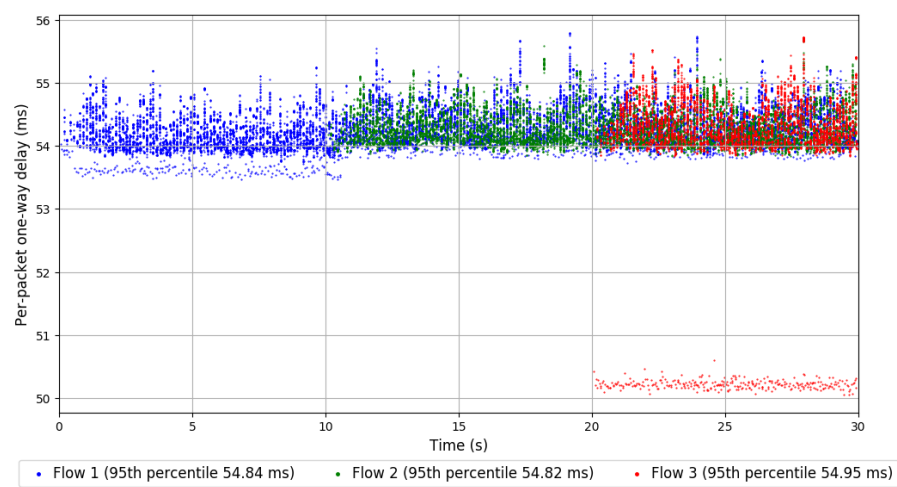
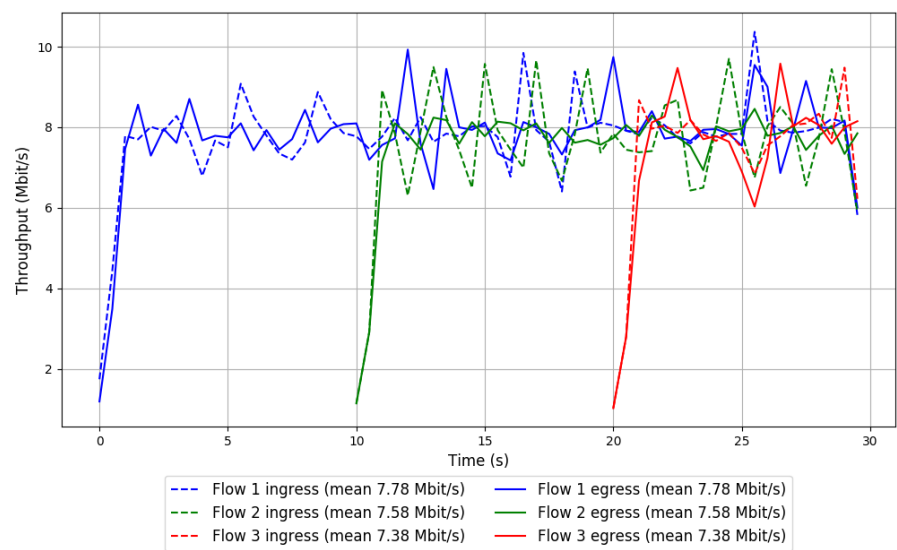
-- Flow 3:

Average throughput: 7.38 Mbit/s

95th percentile per-packet one-way delay: 54.946 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-02-14 10:03:40

End at: 2018-02-14 10:04:10

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.47 Mbit/s

95th percentile per-packet one-way delay: 54.379 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 54.391 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.74 Mbit/s

95th percentile per-packet one-way delay: 54.416 ms

Loss rate: 0.00%

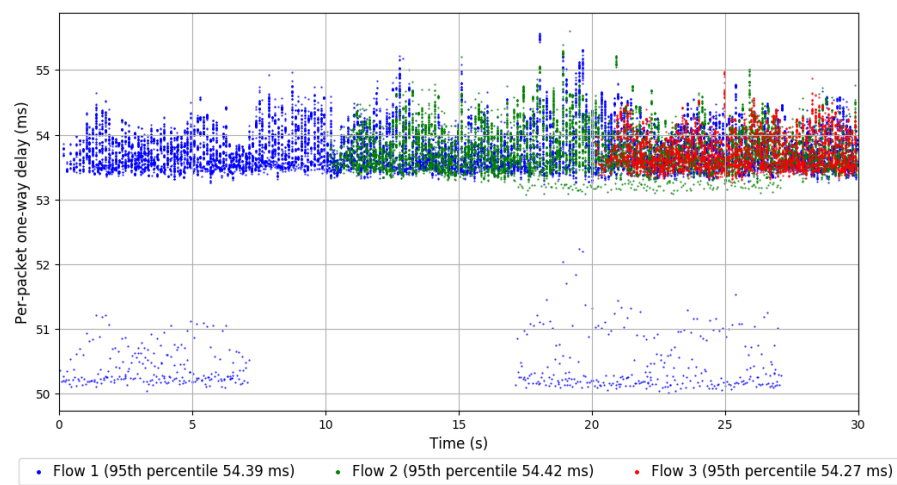
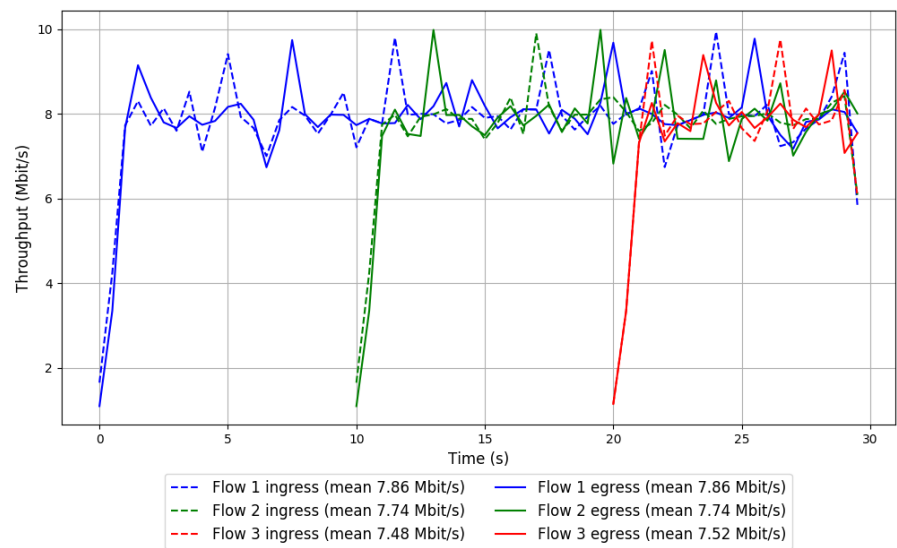
-- Flow 3:

Average throughput: 7.52 Mbit/s

95th percentile per-packet one-way delay: 54.269 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-02-14 10:21:09

End at: 2018-02-14 10:21:39

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.23 Mbit/s

95th percentile per-packet one-way delay: 54.477 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 54.449 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.66 Mbit/s

95th percentile per-packet one-way delay: 54.508 ms

Loss rate: 0.00%

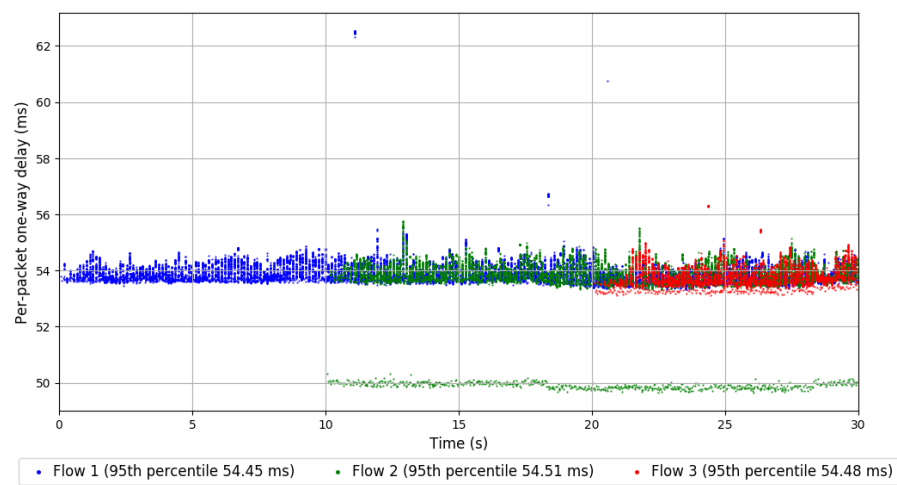
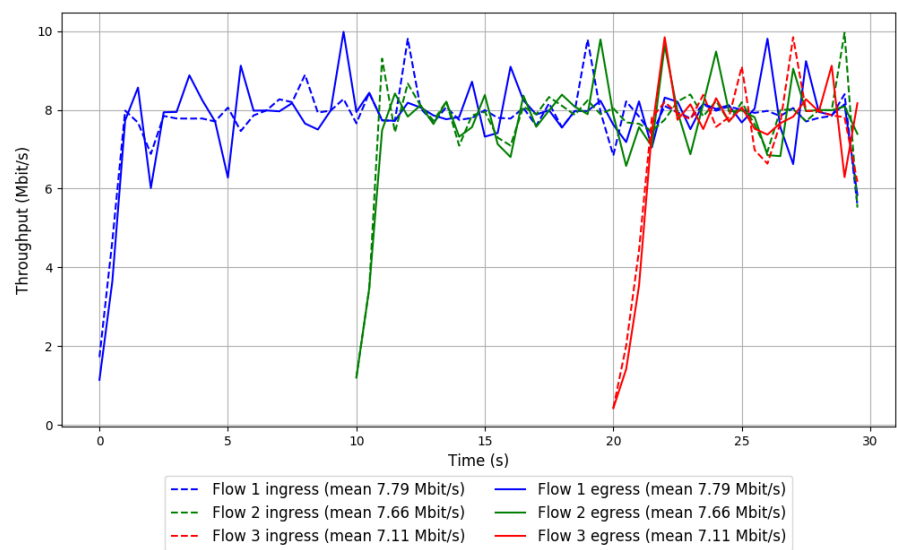
-- Flow 3:

Average throughput: 7.11 Mbit/s

95th percentile per-packet one-way delay: 54.483 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-02-14 10:38:46

End at: 2018-02-14 10:39:16

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 14.90 Mbit/s

95th percentile per-packet one-way delay: 54.392 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.51 Mbit/s

95th percentile per-packet one-way delay: 54.345 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.42 Mbit/s

95th percentile per-packet one-way delay: 54.465 ms

Loss rate: 0.00%

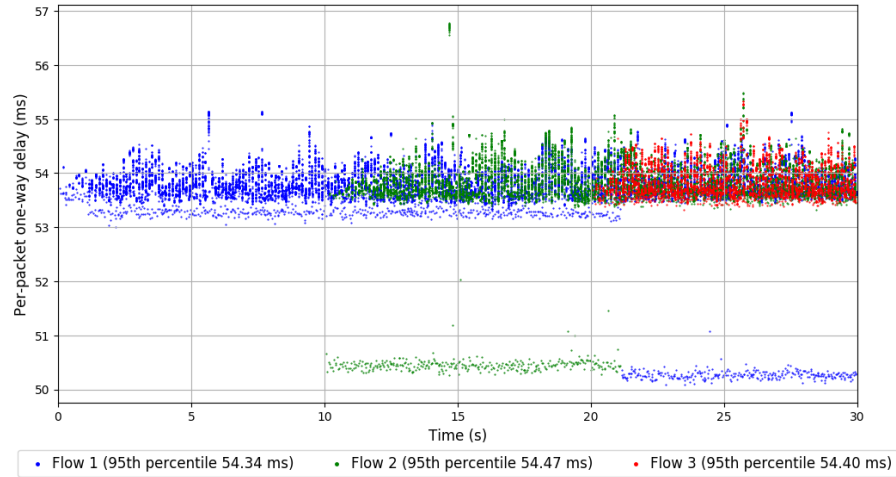
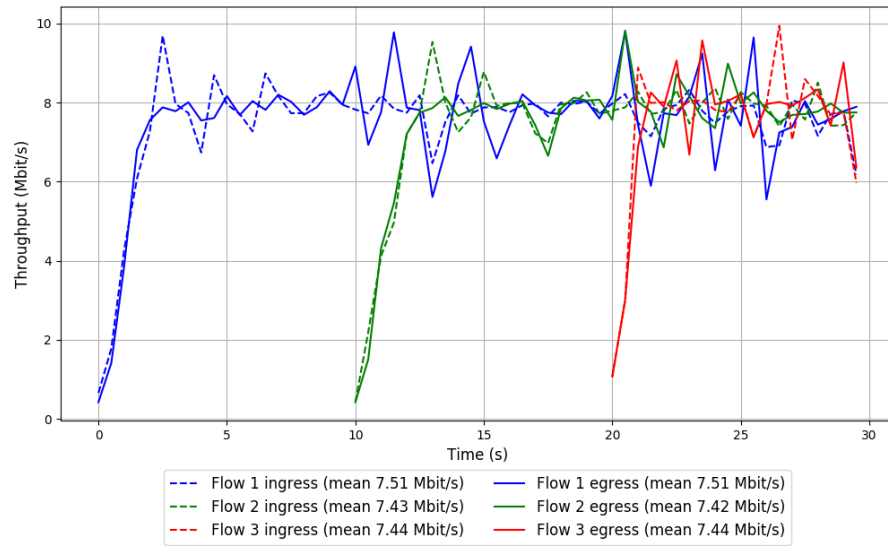
-- Flow 3:

Average throughput: 7.44 Mbit/s

95th percentile per-packet one-way delay: 54.404 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-02-14 10:56:21

End at: 2018-02-14 10:56:51

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.28 Mbit/s

95th percentile per-packet one-way delay: 54.542 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.72 Mbit/s

95th percentile per-packet one-way delay: 54.450 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 54.668 ms

Loss rate: 0.00%

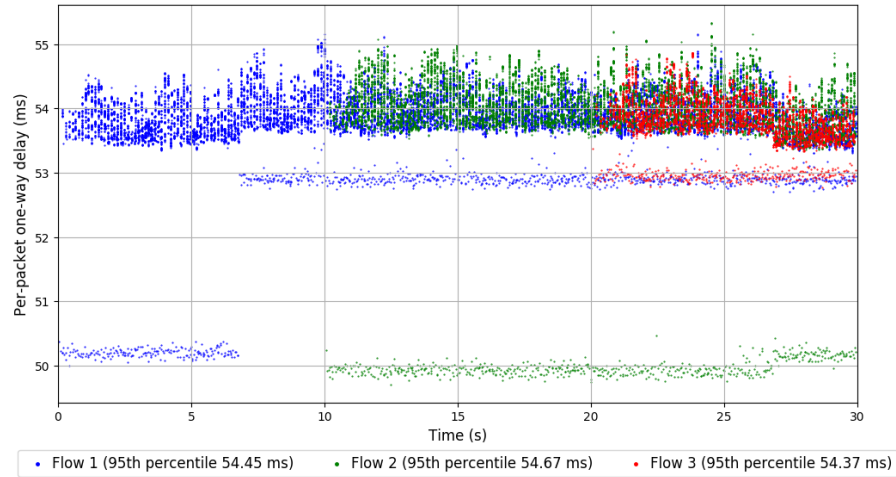
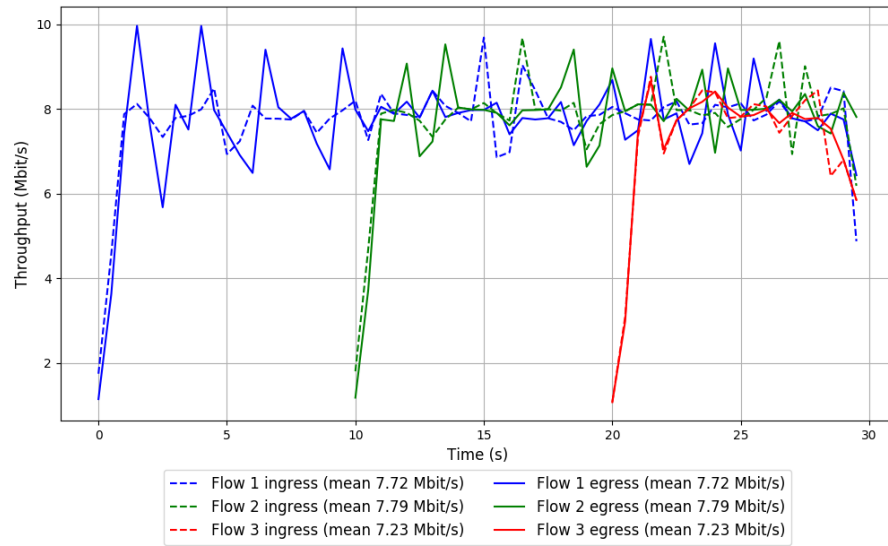
-- Flow 3:

Average throughput: 7.23 Mbit/s

95th percentile per-packet one-way delay: 54.373 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-02-14 11:13:49

End at: 2018-02-14 11:14:19

Below is generated by plot.py at 2018-02-14 14:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.25 Mbit/s

95th percentile per-packet one-way delay: 54.363 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.73 Mbit/s

95th percentile per-packet one-way delay: 54.437 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.60 Mbit/s

95th percentile per-packet one-way delay: 54.240 ms

Loss rate: 0.00%

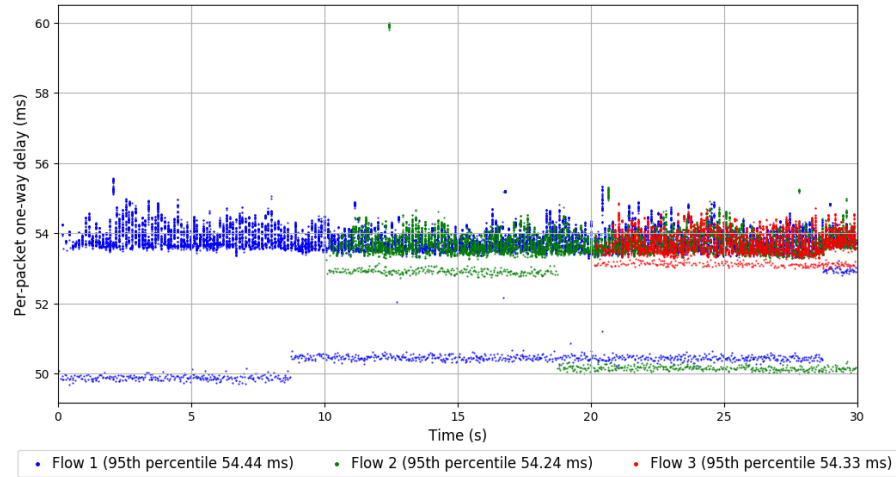
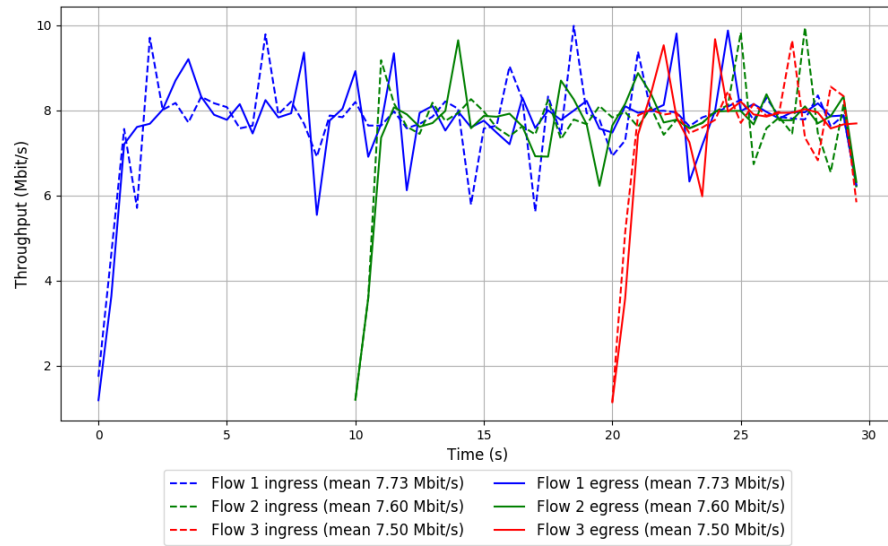
-- Flow 3:

Average throughput: 7.50 Mbit/s

95th percentile per-packet one-way delay: 54.330 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

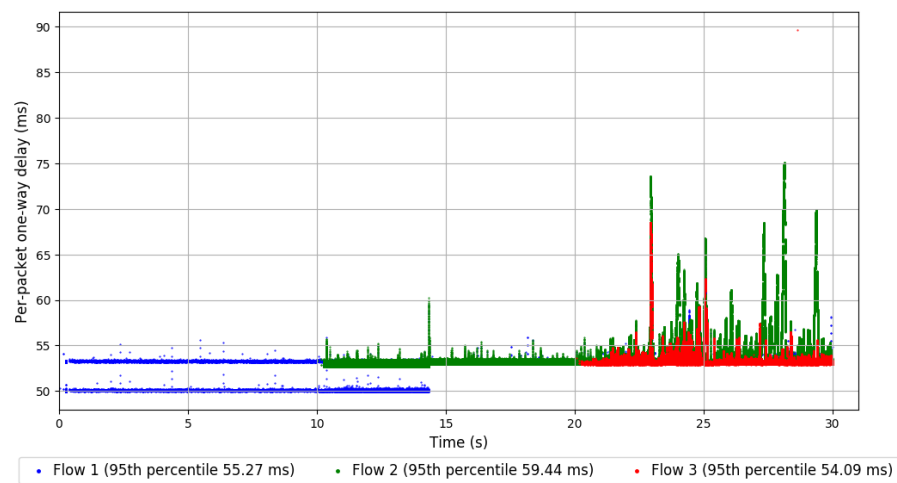
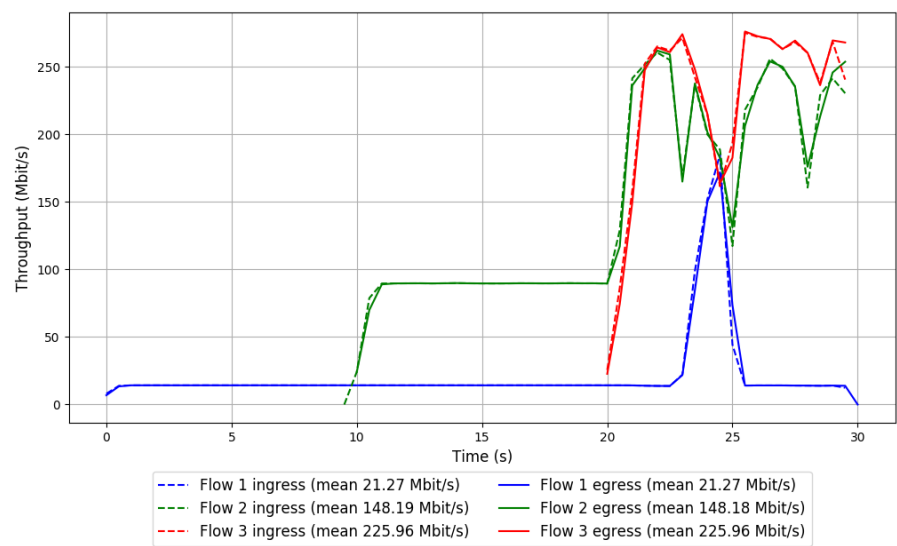


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-02-14 08:35:03
End at: 2018-02-14 08:35:33

# Below is generated by plot.py at 2018-02-14 14:26:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 194.91 Mbit/s
95th percentile per-packet one-way delay: 57.039 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 21.27 Mbit/s
95th percentile per-packet one-way delay: 55.275 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 148.18 Mbit/s
95th percentile per-packet one-way delay: 59.443 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 225.96 Mbit/s
95th percentile per-packet one-way delay: 54.089 ms
Loss rate: 0.03%
```


Run 1: Report of TaoVA-100x — Data Link

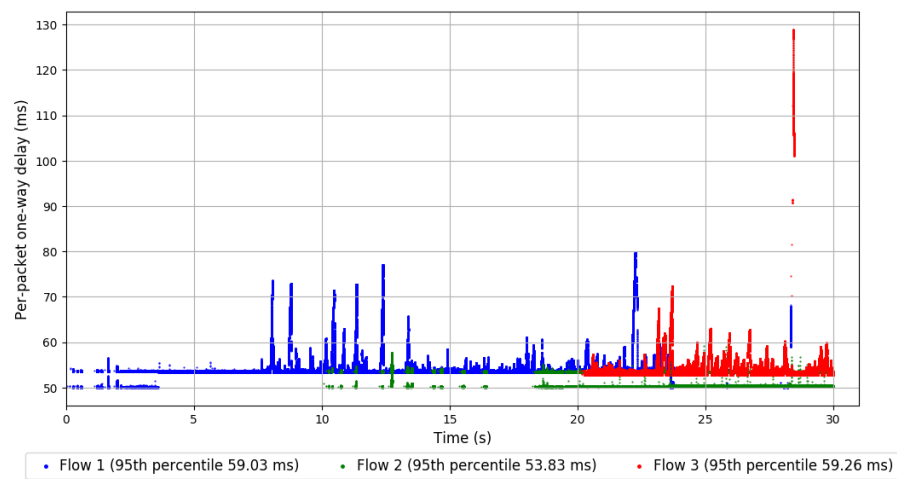
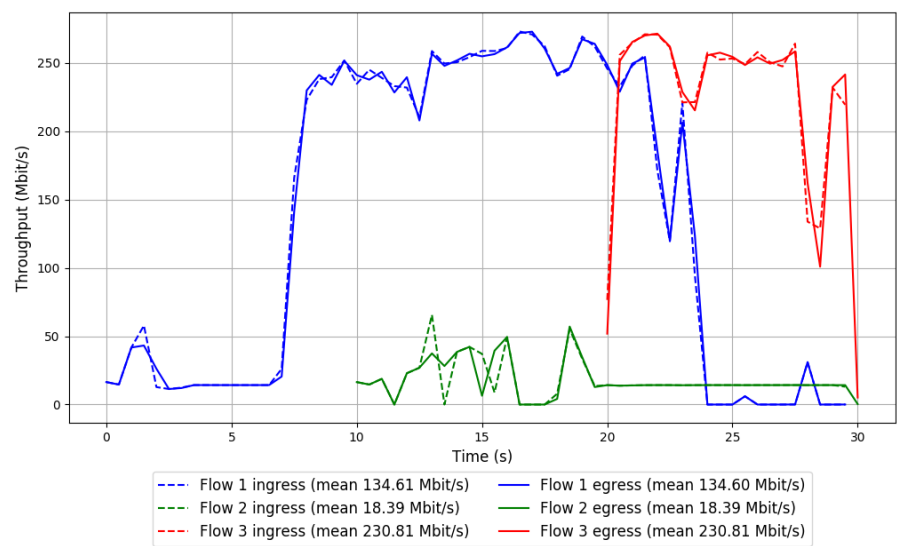


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-02-14 08:52:24
End at: 2018-02-14 08:52:54

# Below is generated by plot.py at 2018-02-14 14:26:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 223.11 Mbit/s
95th percentile per-packet one-way delay: 58.900 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 134.60 Mbit/s
95th percentile per-packet one-way delay: 59.030 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 18.39 Mbit/s
95th percentile per-packet one-way delay: 53.831 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 230.81 Mbit/s
95th percentile per-packet one-way delay: 59.255 ms
Loss rate: 0.02%
```

Run 2: Report of TaoVA-100x — Data Link

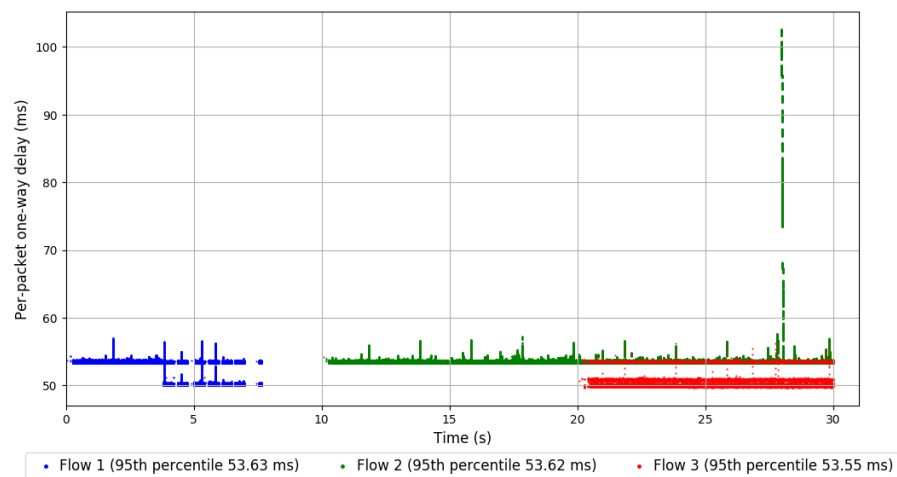
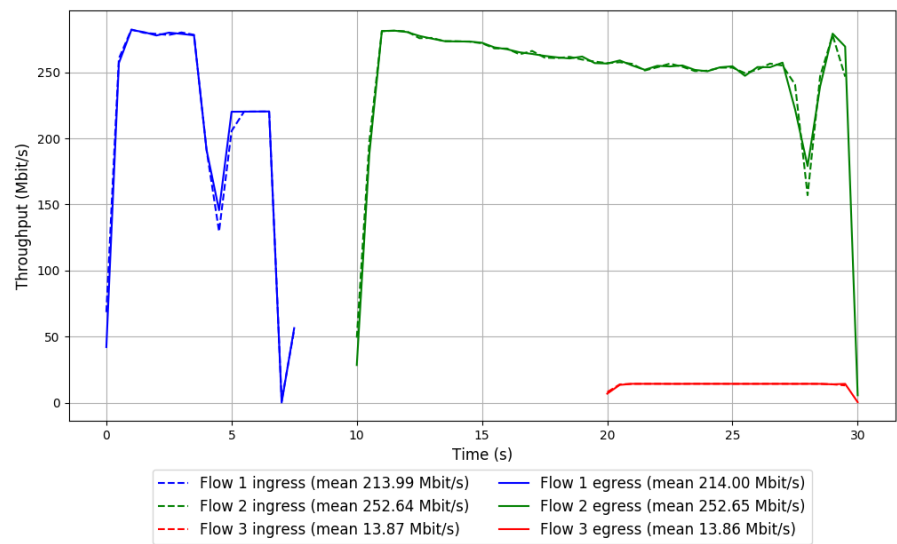


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-02-14 09:09:44
End at: 2018-02-14 09:10:14

# Below is generated by plot.py at 2018-02-14 14:27:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 227.08 Mbit/s
95th percentile per-packet one-way delay: 53.620 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 214.00 Mbit/s
95th percentile per-packet one-way delay: 53.626 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 252.65 Mbit/s
95th percentile per-packet one-way delay: 53.617 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 13.86 Mbit/s
95th percentile per-packet one-way delay: 53.545 ms
Loss rate: 0.02%
```

Run 3: Report of TaoVA-100x — Data Link



Run 4: Statistics of TaoVA-100x

Start at: 2018-02-14 09:27:22

End at: 2018-02-14 09:27:52

Below is generated by plot.py at 2018-02-14 14:32:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 366.86 Mbit/s

95th percentile per-packet one-way delay: 61.434 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 239.75 Mbit/s

95th percentile per-packet one-way delay: 61.753 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 76.76 Mbit/s

95th percentile per-packet one-way delay: 56.490 ms

Loss rate: 0.00%

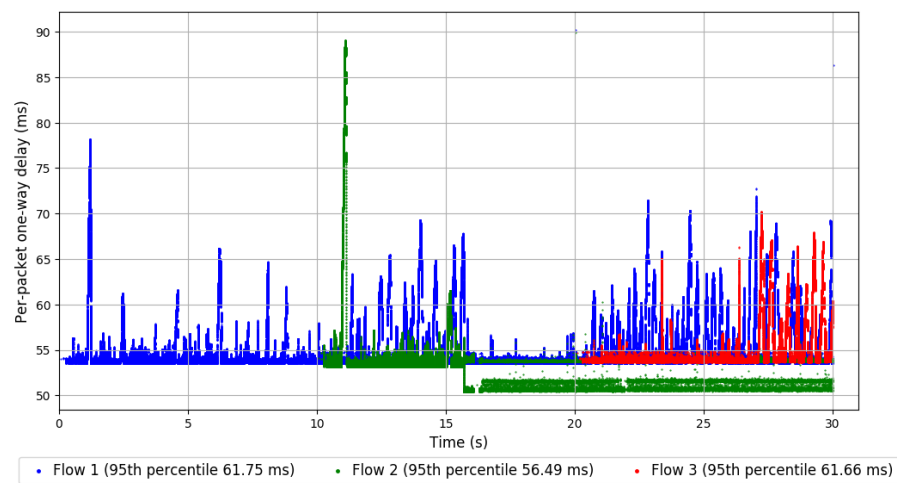
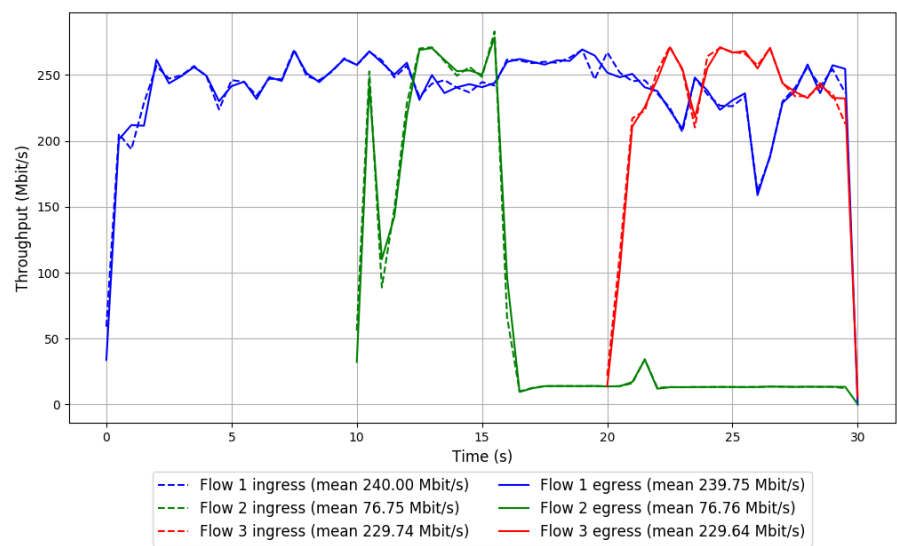
-- Flow 3:

Average throughput: 229.64 Mbit/s

95th percentile per-packet one-way delay: 61.658 ms

Loss rate: 0.08%

Run 4: Report of TaoVA-100x — Data Link



Run 5: Statistics of TaoVA-100x

Start at: 2018-02-14 09:44:55

End at: 2018-02-14 09:45:25

Below is generated by plot.py at 2018-02-14 14:32:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 156.72 Mbit/s

95th percentile per-packet one-way delay: 54.204 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 59.22 Mbit/s

95th percentile per-packet one-way delay: 54.256 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 67.69 Mbit/s

95th percentile per-packet one-way delay: 54.060 ms

Loss rate: 0.00%

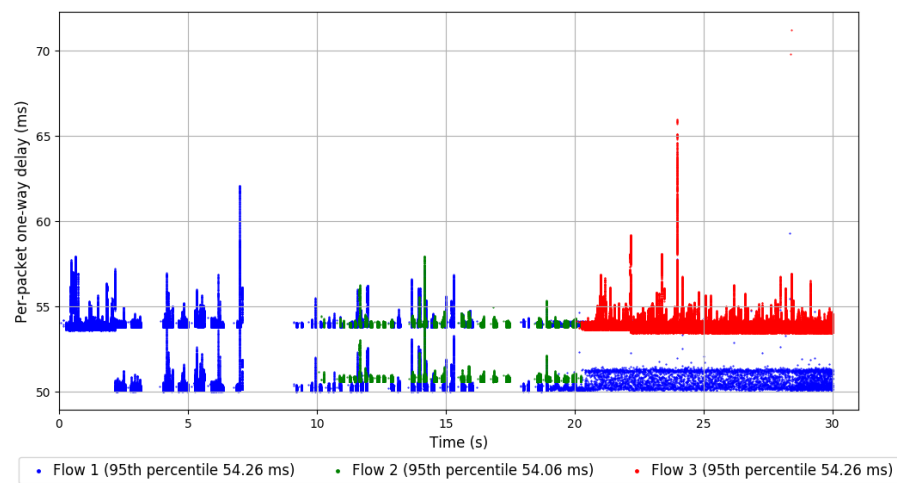
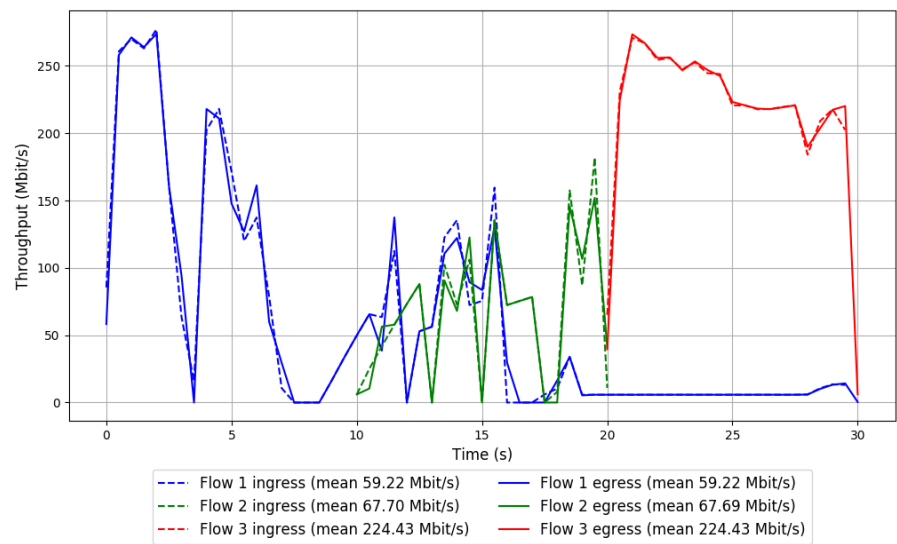
-- Flow 3:

Average throughput: 224.43 Mbit/s

95th percentile per-packet one-way delay: 54.263 ms

Loss rate: 0.00%

Run 5: Report of TaoVA-100x — Data Link



Run 6: Statistics of TaoVA-100x

Start at: 2018-02-14 10:02:31

End at: 2018-02-14 10:03:01

Below is generated by plot.py at 2018-02-14 14:32:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 346.76 Mbit/s

95th percentile per-packet one-way delay: 54.026 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 253.60 Mbit/s

95th percentile per-packet one-way delay: 54.096 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 13.68 Mbit/s

95th percentile per-packet one-way delay: 53.467 ms

Loss rate: 0.00%

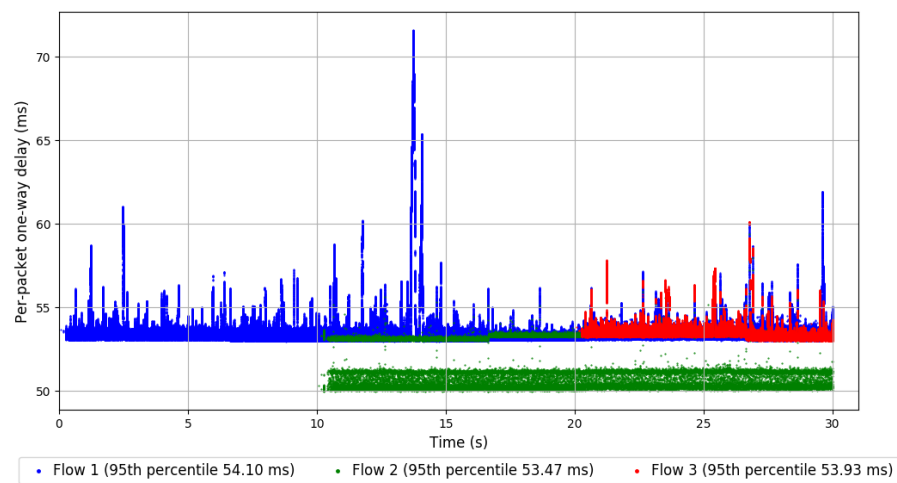
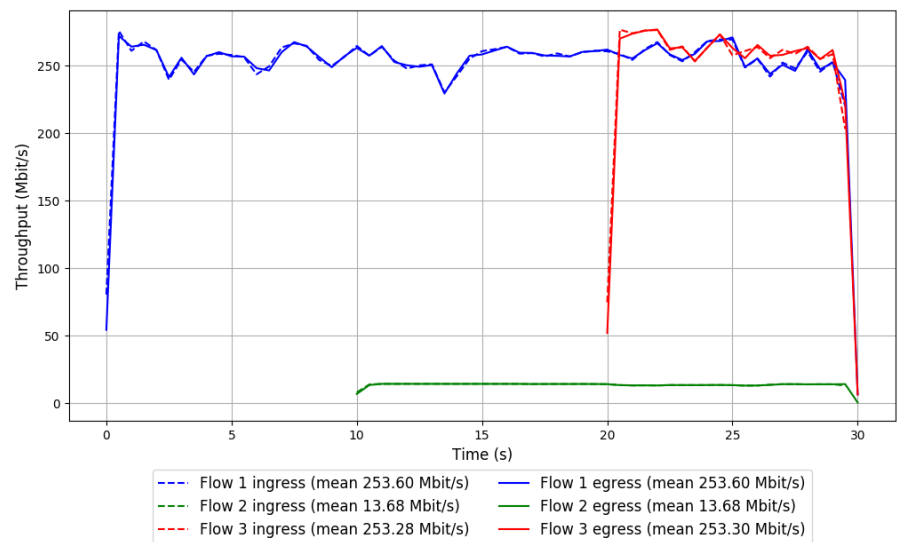
-- Flow 3:

Average throughput: 253.30 Mbit/s

95th percentile per-packet one-way delay: 53.928 ms

Loss rate: 0.00%

Run 6: Report of TaoVA-100x — Data Link

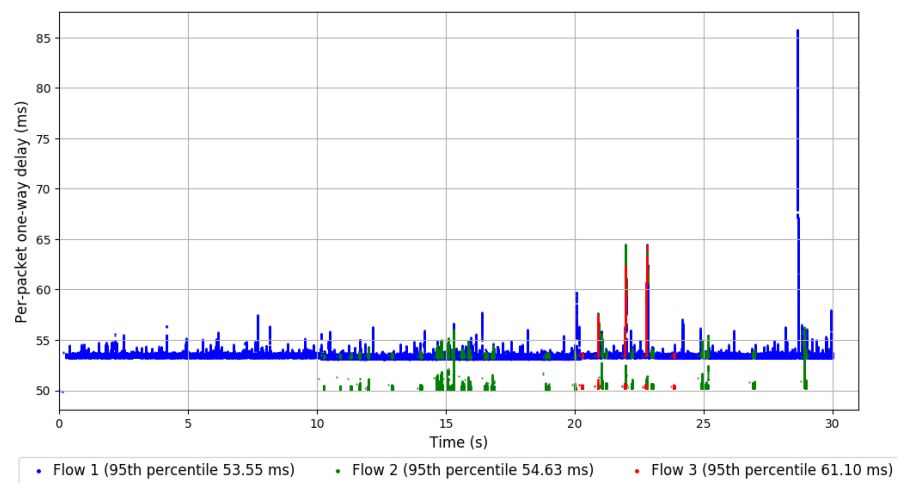
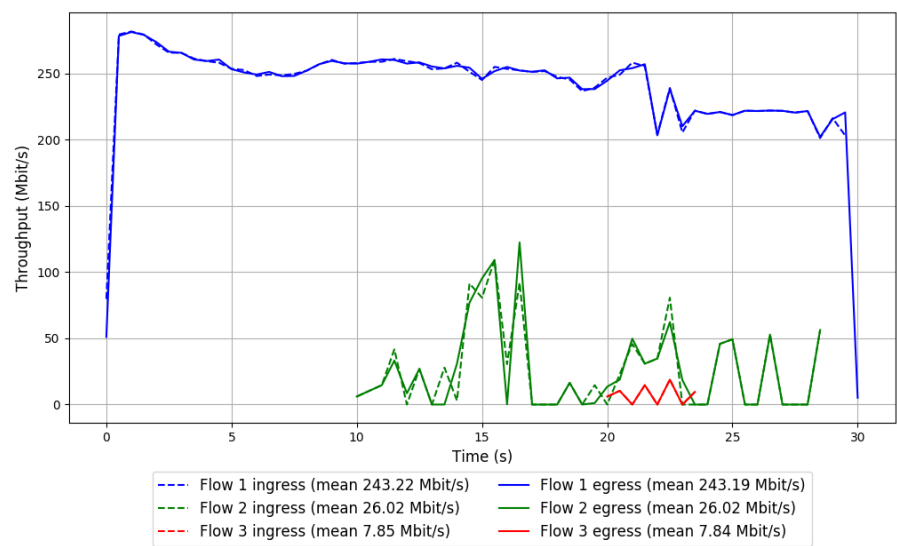


```
Run 7: Statistics of TaoVA-100x

Start at: 2018-02-14 10:20:07
End at: 2018-02-14 10:20:37

# Below is generated by plot.py at 2018-02-14 14:33:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 260.62 Mbit/s
95th percentile per-packet one-way delay: 53.577 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 243.19 Mbit/s
95th percentile per-packet one-way delay: 53.553 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 26.02 Mbit/s
95th percentile per-packet one-way delay: 54.632 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.84 Mbit/s
95th percentile per-packet one-way delay: 61.104 ms
Loss rate: 0.00%
```

Run 7: Report of TaoVA-100x — Data Link



Run 8: Statistics of TaoVA-100x

Start at: 2018-02-14 10:37:50

End at: 2018-02-14 10:38:20

Below is generated by plot.py at 2018-02-14 14:33:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 204.73 Mbit/s

95th percentile per-packet one-way delay: 55.331 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 34.14 Mbit/s

95th percentile per-packet one-way delay: 53.820 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 159.38 Mbit/s

95th percentile per-packet one-way delay: 57.594 ms

Loss rate: 0.02%

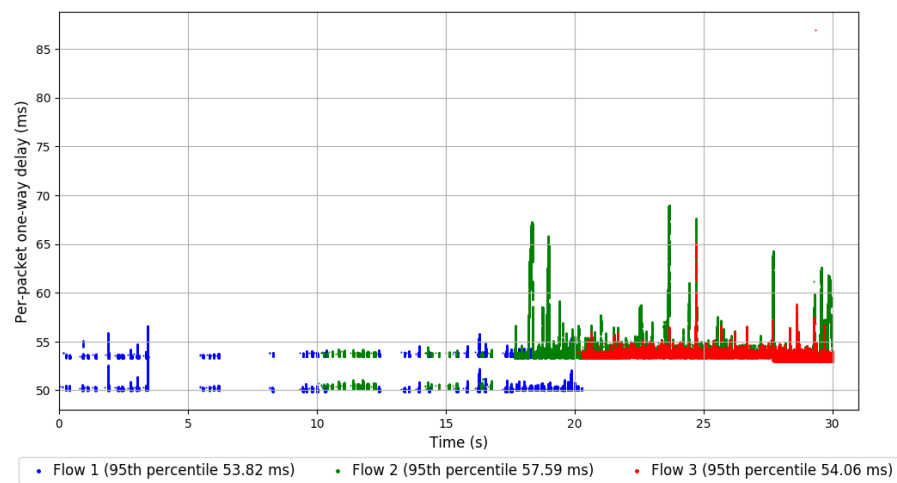
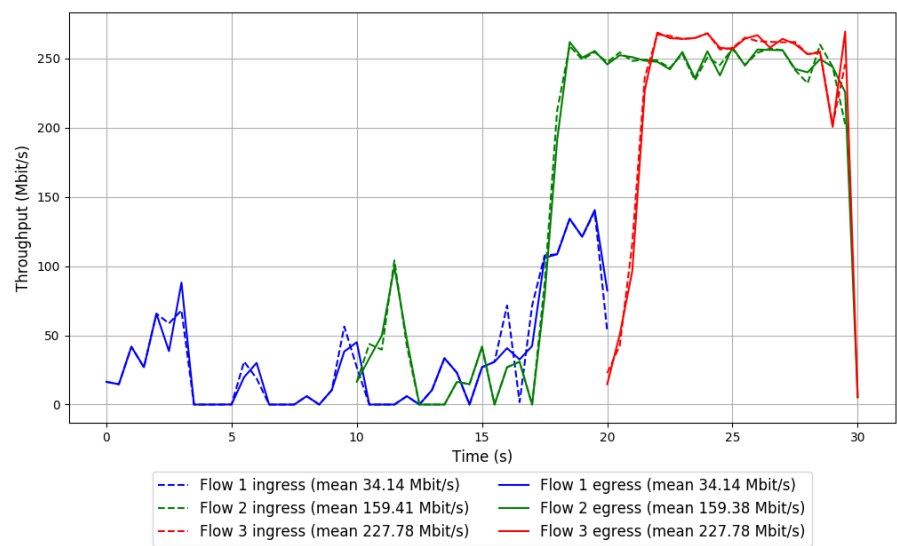
-- Flow 3:

Average throughput: 227.78 Mbit/s

95th percentile per-packet one-way delay: 54.063 ms

Loss rate: 0.03%

Run 8: Report of TaoVA-100x — Data Link



Run 9: Statistics of TaoVA-100x

Start at: 2018-02-14 10:55:18

End at: 2018-02-14 10:55:48

Below is generated by plot.py at 2018-02-14 14:33:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 268.51 Mbit/s

95th percentile per-packet one-way delay: 56.166 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 250.69 Mbit/s

95th percentile per-packet one-way delay: 56.287 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 20.21 Mbit/s

95th percentile per-packet one-way delay: 53.981 ms

Loss rate: 0.01%

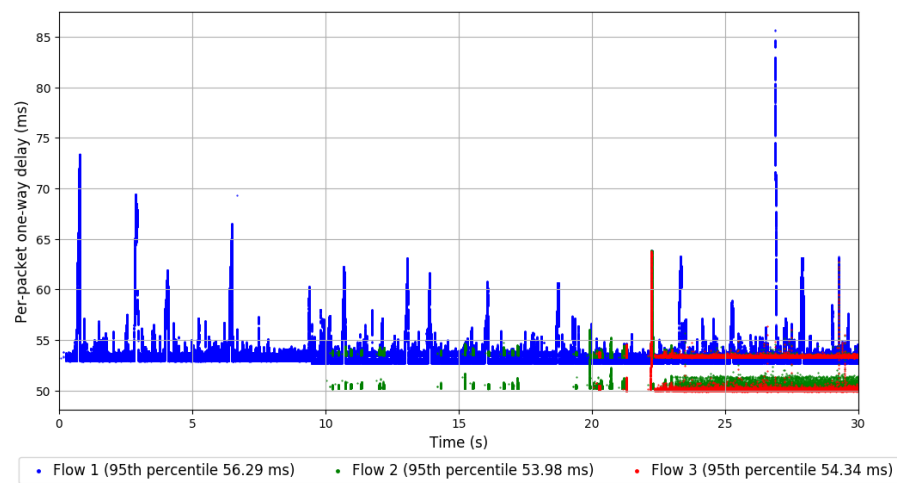
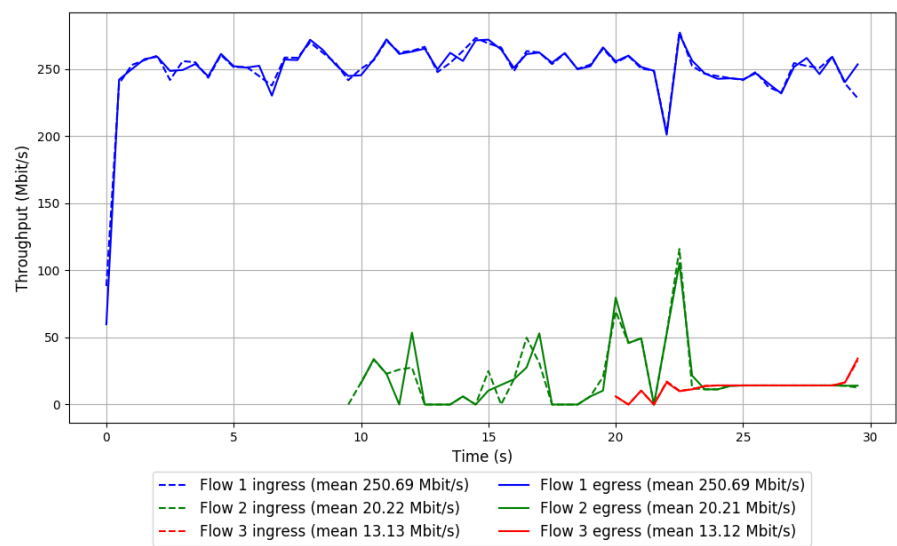
-- Flow 3:

Average throughput: 13.12 Mbit/s

95th percentile per-packet one-way delay: 54.340 ms

Loss rate: 0.03%

Run 9: Report of TaoVA-100x — Data Link

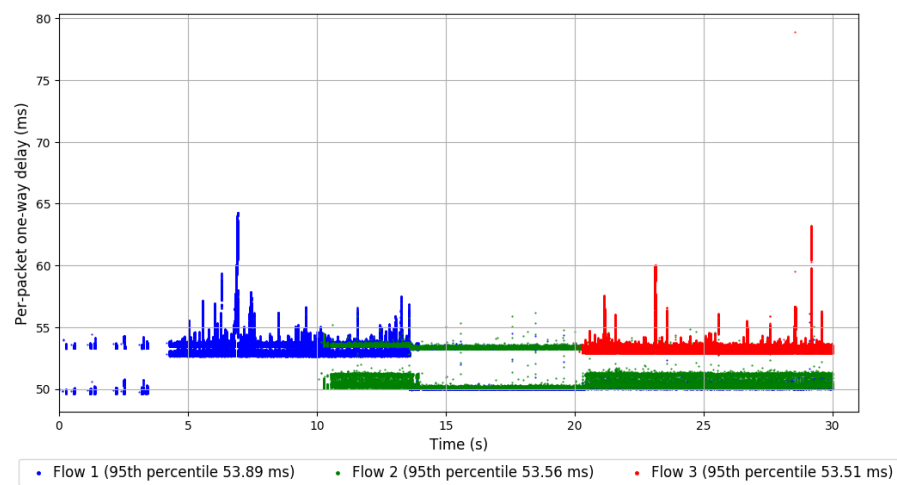
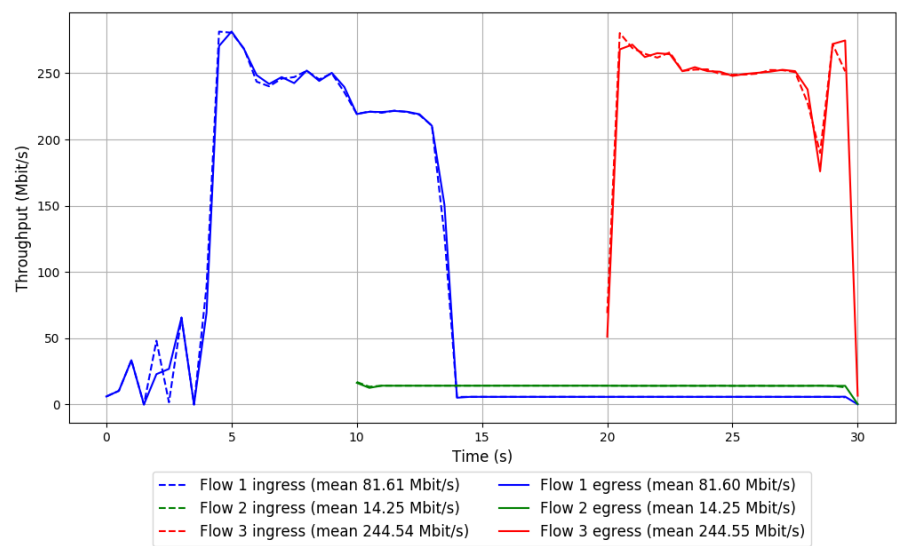


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-02-14 11:12:54
End at: 2018-02-14 11:13:24

# Below is generated by plot.py at 2018-02-14 14:33:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 172.22 Mbit/s
95th percentile per-packet one-way delay: 53.702 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 81.60 Mbit/s
95th percentile per-packet one-way delay: 53.889 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 14.25 Mbit/s
95th percentile per-packet one-way delay: 53.562 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 244.55 Mbit/s
95th percentile per-packet one-way delay: 53.505 ms
Loss rate: 0.00%
```

Run 10: Report of TaoVA-100x — Data Link



Run 1: Statistics of TCP Vegas

Start at: 2018-02-14 08:29:51

End at: 2018-02-14 08:30:21

Below is generated by plot.py at 2018-02-14 14:33:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 285.95 Mbit/s

95th percentile per-packet one-way delay: 60.036 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 119.80 Mbit/s

95th percentile per-packet one-way delay: 57.544 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 200.49 Mbit/s

95th percentile per-packet one-way delay: 60.732 ms

Loss rate: 0.00%

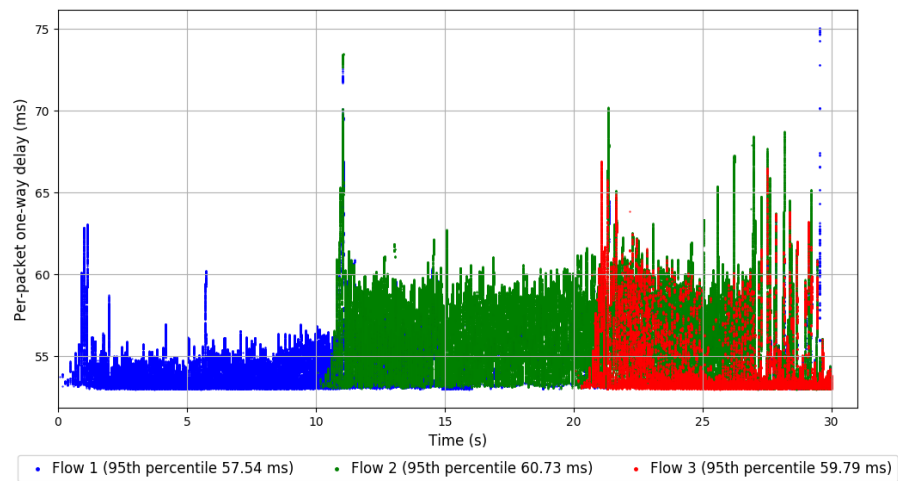
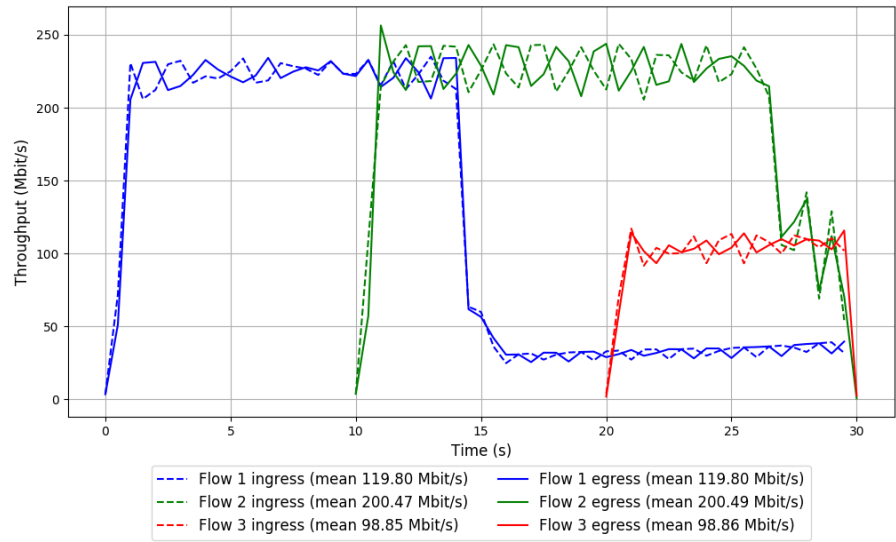
-- Flow 3:

Average throughput: 98.86 Mbit/s

95th percentile per-packet one-way delay: 59.793 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-02-14 08:47:17

End at: 2018-02-14 08:47:47

Below is generated by plot.py at 2018-02-14 14:33:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 59.18 Mbit/s

95th percentile per-packet one-way delay: 55.183 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 12.69 Mbit/s

95th percentile per-packet one-way delay: 54.064 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 41.90 Mbit/s

95th percentile per-packet one-way delay: 57.985 ms

Loss rate: 0.01%

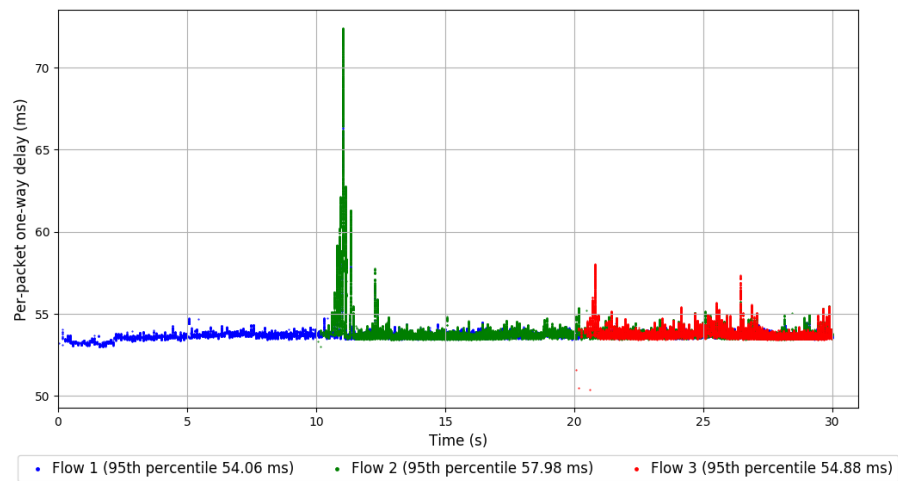
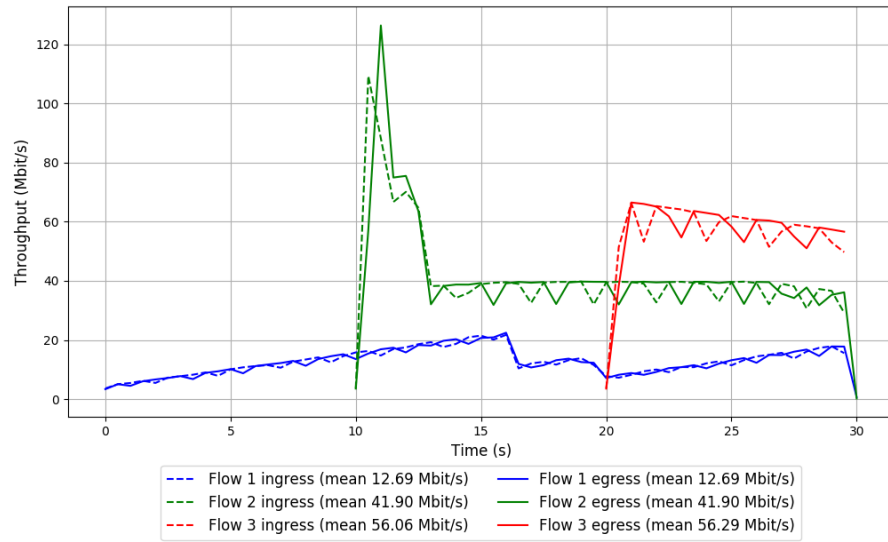
-- Flow 3:

Average throughput: 56.29 Mbit/s

95th percentile per-packet one-way delay: 54.878 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-02-14 09:04:40

End at: 2018-02-14 09:05:10

Below is generated by plot.py at 2018-02-14 14:33:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 103.36 Mbit/s

95th percentile per-packet one-way delay: 54.558 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.79 Mbit/s

95th percentile per-packet one-way delay: 54.448 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 32.13 Mbit/s

95th percentile per-packet one-way delay: 54.573 ms

Loss rate: 0.00%

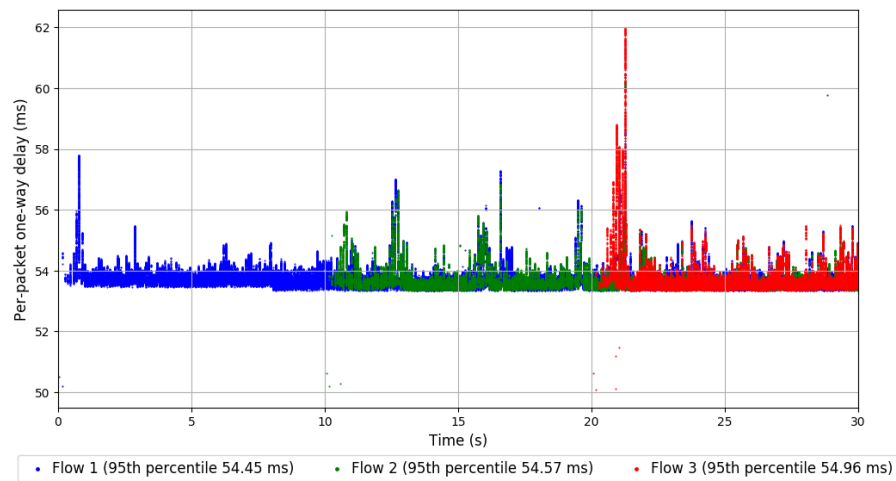
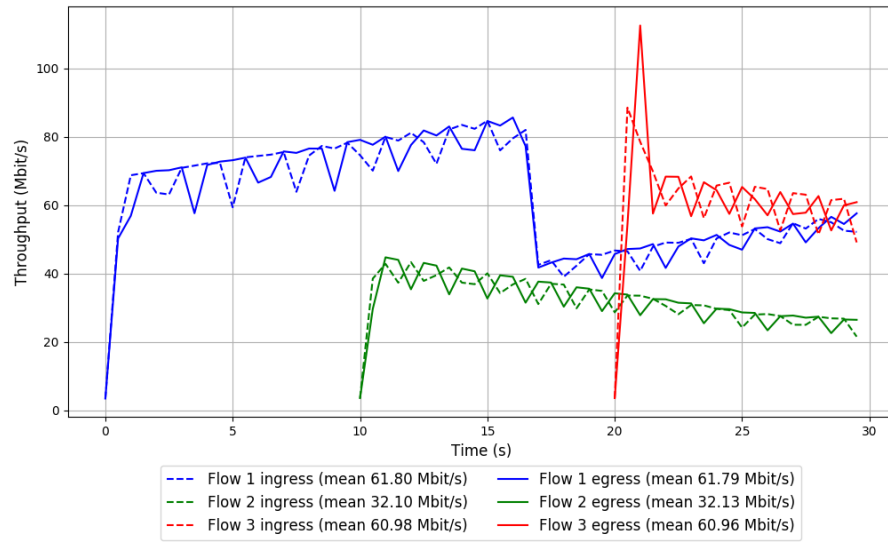
-- Flow 3:

Average throughput: 60.96 Mbit/s

95th percentile per-packet one-way delay: 54.958 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-02-14 09:22:13

End at: 2018-02-14 09:22:43

Below is generated by plot.py at 2018-02-14 14:33:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 193.67 Mbit/s

95th percentile per-packet one-way delay: 60.690 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 28.88 Mbit/s

95th percentile per-packet one-way delay: 57.805 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 211.53 Mbit/s

95th percentile per-packet one-way delay: 60.906 ms

Loss rate: 0.20%

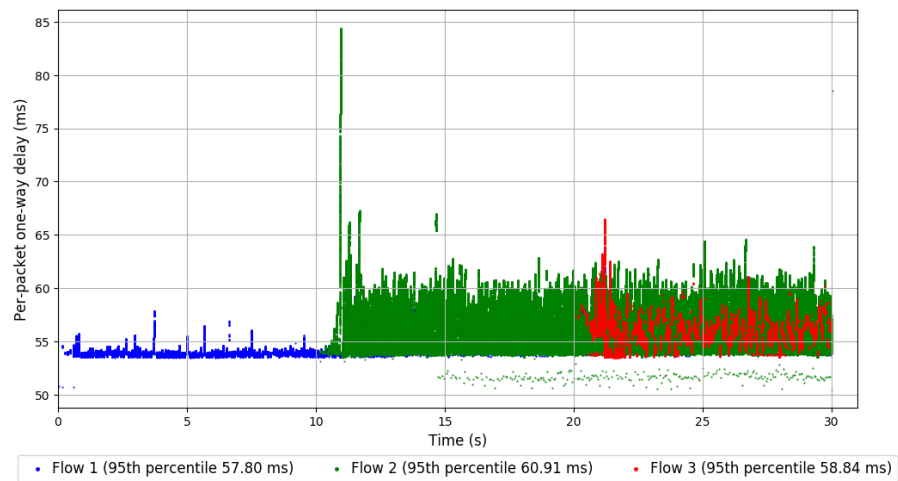
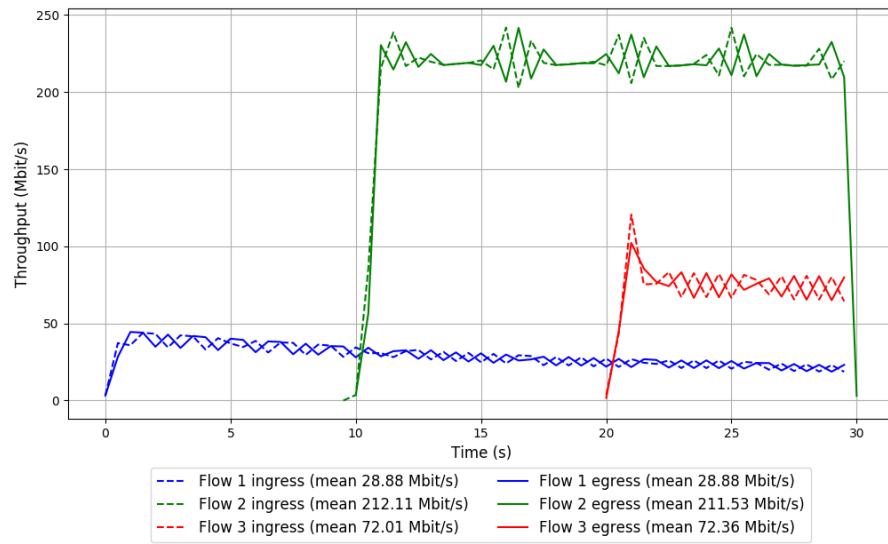
-- Flow 3:

Average throughput: 72.36 Mbit/s

95th percentile per-packet one-way delay: 58.839 ms

Loss rate: 0.02%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-02-14 09:39:54

End at: 2018-02-14 09:40:24

Below is generated by plot.py at 2018-02-14 14:33:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.56 Mbit/s

95th percentile per-packet one-way delay: 54.797 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 17.76 Mbit/s

95th percentile per-packet one-way delay: 54.624 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.47 Mbit/s

95th percentile per-packet one-way delay: 54.709 ms

Loss rate: 0.00%

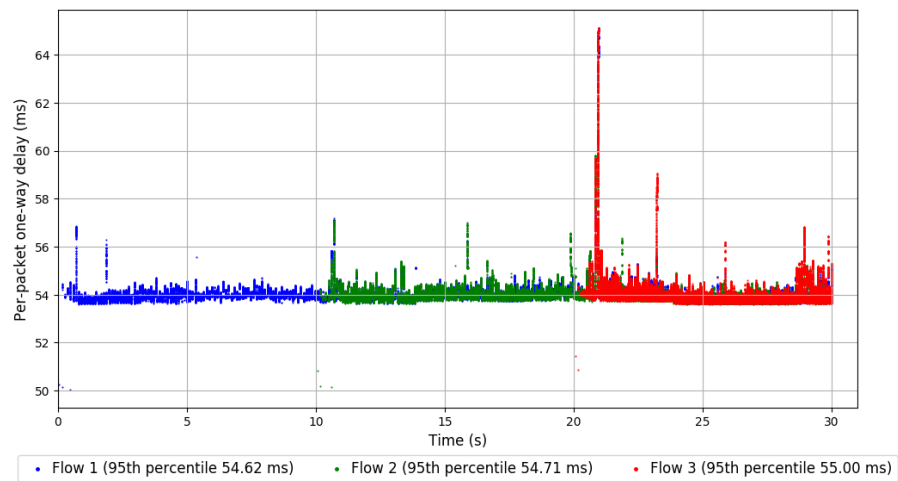
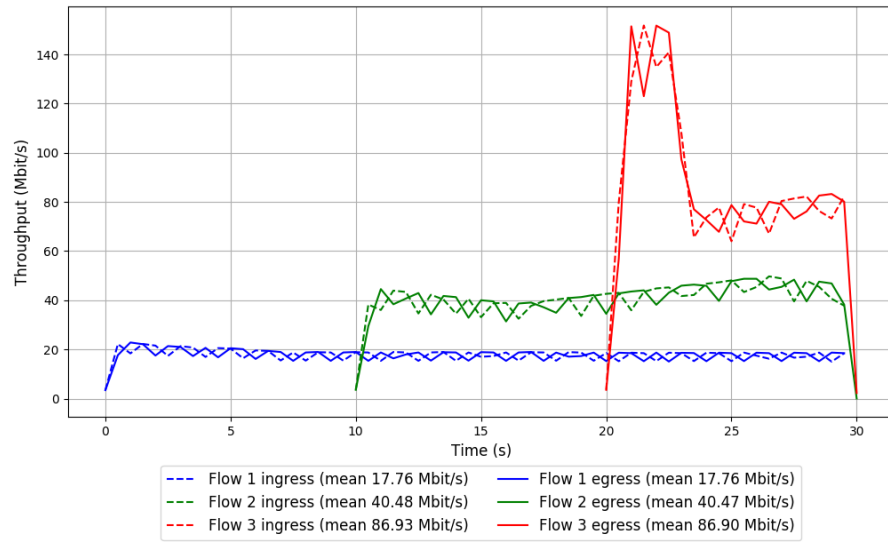
-- Flow 3:

Average throughput: 86.90 Mbit/s

95th percentile per-packet one-way delay: 55.004 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-02-14 09:57:17

End at: 2018-02-14 09:57:47

Below is generated by plot.py at 2018-02-14 14:34:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 179.79 Mbit/s

95th percentile per-packet one-way delay: 59.267 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 103.24 Mbit/s

95th percentile per-packet one-way delay: 59.714 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 68.92 Mbit/s

95th percentile per-packet one-way delay: 54.190 ms

Loss rate: 0.03%

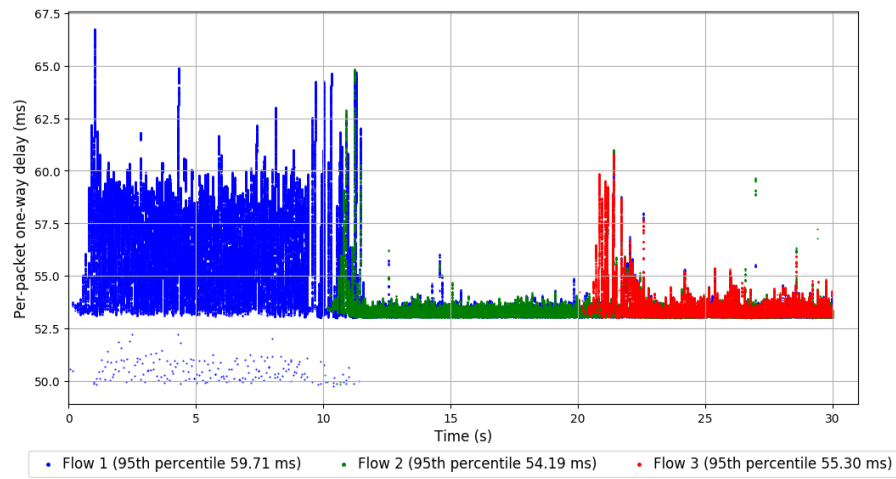
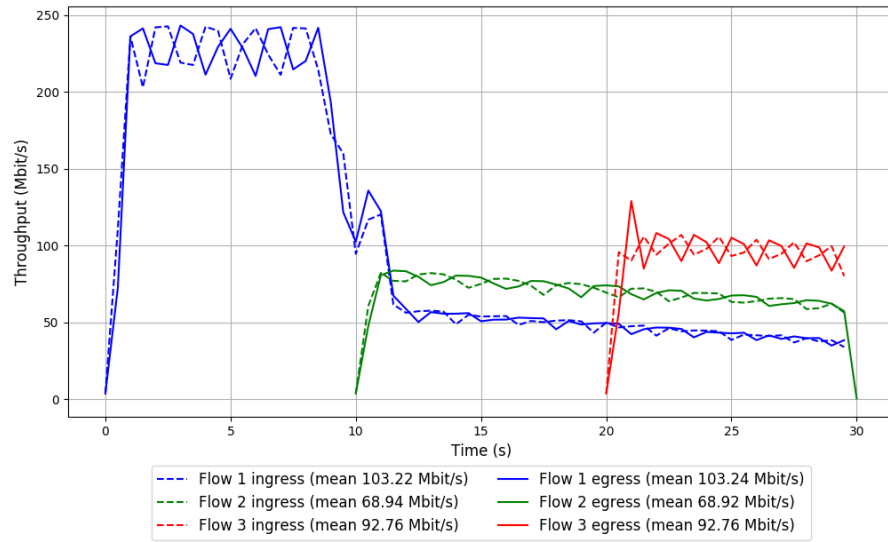
-- Flow 3:

Average throughput: 92.76 Mbit/s

95th percentile per-packet one-way delay: 55.300 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-02-14 10:15:04

End at: 2018-02-14 10:15:34

Below is generated by plot.py at 2018-02-14 14:34:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 134.16 Mbit/s

95th percentile per-packet one-way delay: 54.429 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 58.91 Mbit/s

95th percentile per-packet one-way delay: 54.254 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 81.44 Mbit/s

95th percentile per-packet one-way delay: 54.814 ms

Loss rate: 0.00%

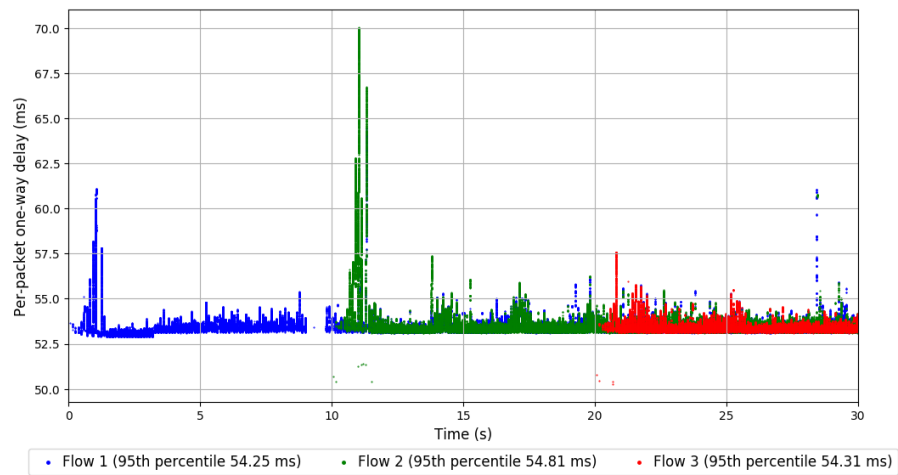
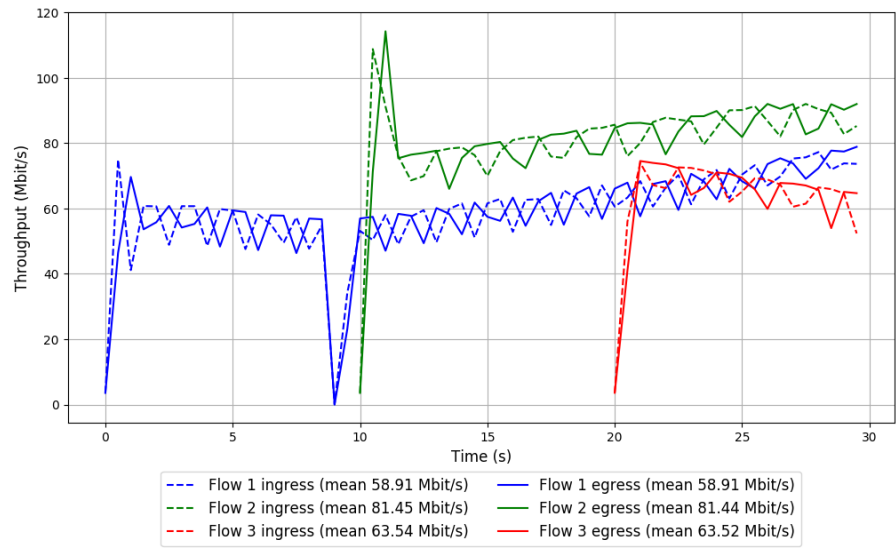
-- Flow 3:

Average throughput: 63.52 Mbit/s

95th percentile per-packet one-way delay: 54.308 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-02-14 10:32:39

End at: 2018-02-14 10:33:09

Below is generated by plot.py at 2018-02-14 14:34:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 165.67 Mbit/s

95th percentile per-packet one-way delay: 59.664 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.08 Mbit/s

95th percentile per-packet one-way delay: 56.564 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 109.29 Mbit/s

95th percentile per-packet one-way delay: 60.450 ms

Loss rate: 0.00%

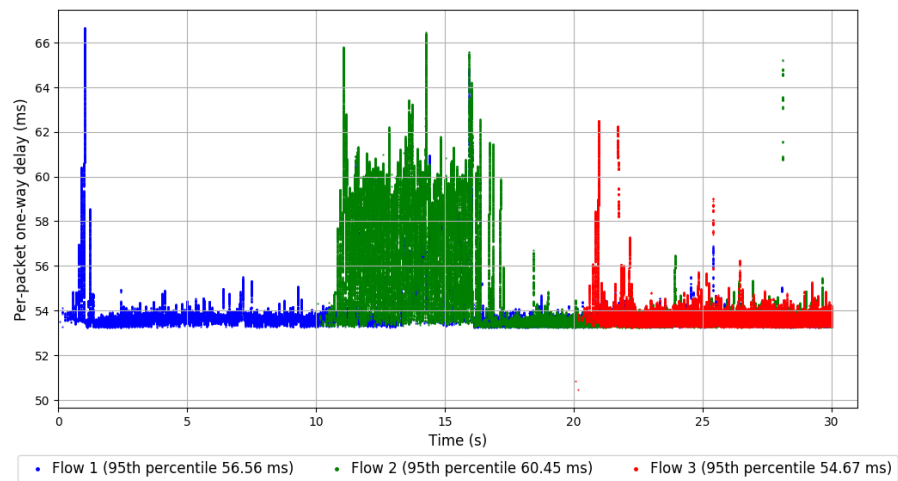
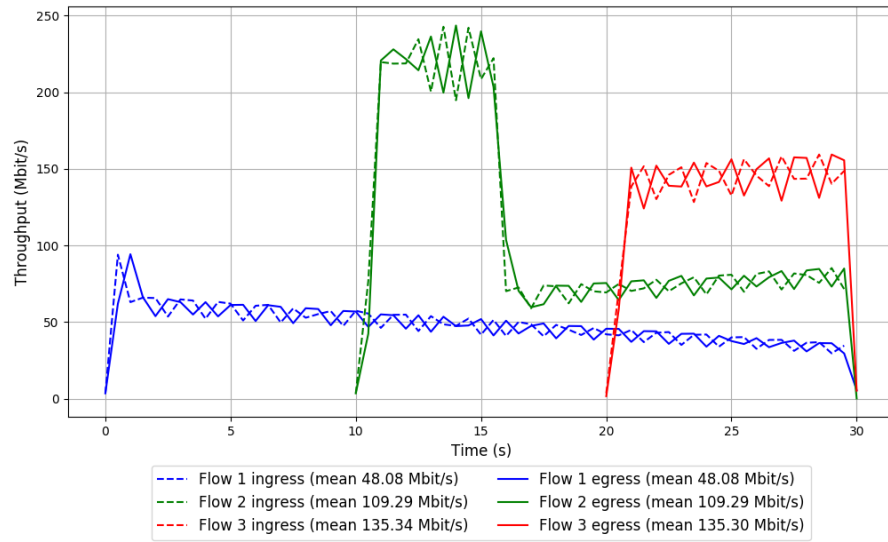
-- Flow 3:

Average throughput: 135.30 Mbit/s

95th percentile per-packet one-way delay: 54.675 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-02-14 10:50:08

End at: 2018-02-14 10:50:38

Below is generated by plot.py at 2018-02-14 14:35:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 169.29 Mbit/s

95th percentile per-packet one-way delay: 54.974 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 136.42 Mbit/s

95th percentile per-packet one-way delay: 55.176 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 31.99 Mbit/s

95th percentile per-packet one-way delay: 54.180 ms

Loss rate: 0.00%

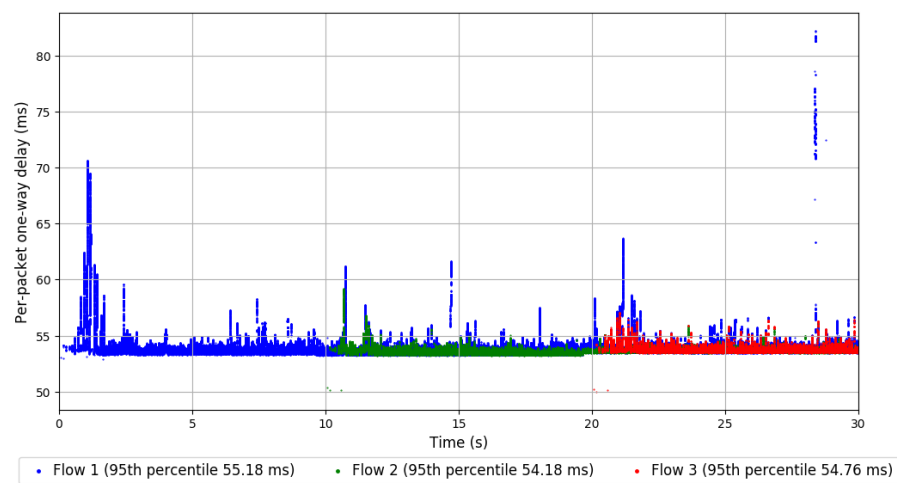
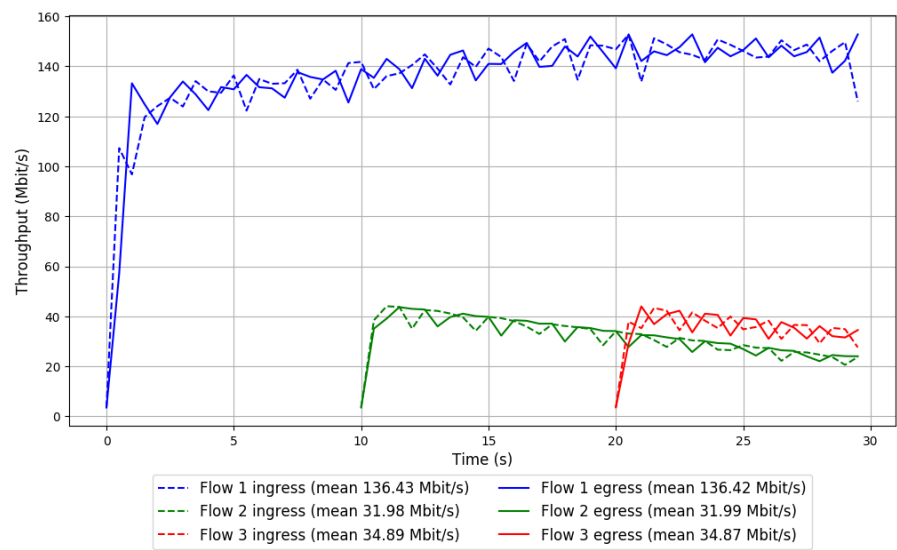
-- Flow 3:

Average throughput: 34.87 Mbit/s

95th percentile per-packet one-way delay: 54.756 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-02-14 11:07:46

End at: 2018-02-14 11:08:16

Below is generated by plot.py at 2018-02-14 14:35:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 115.43 Mbit/s

95th percentile per-packet one-way delay: 54.826 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 22.13 Mbit/s

95th percentile per-packet one-way delay: 54.561 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 112.63 Mbit/s

95th percentile per-packet one-way delay: 54.962 ms

Loss rate: 0.00%

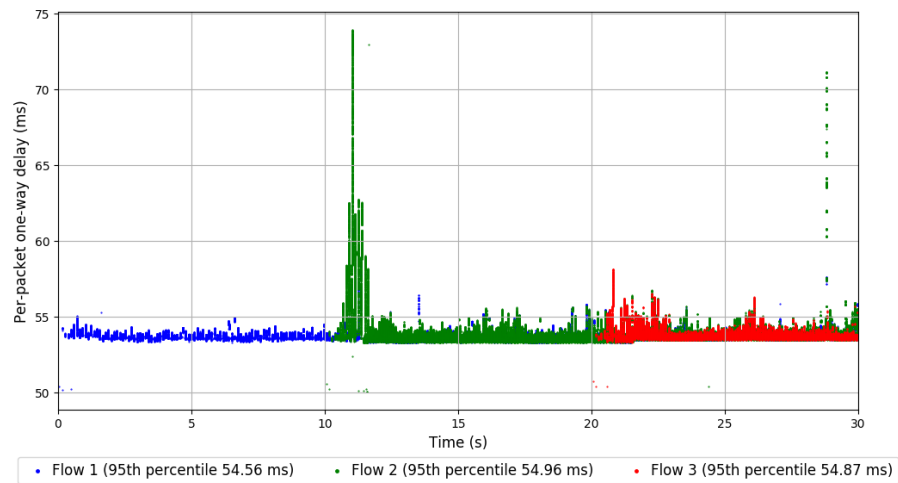
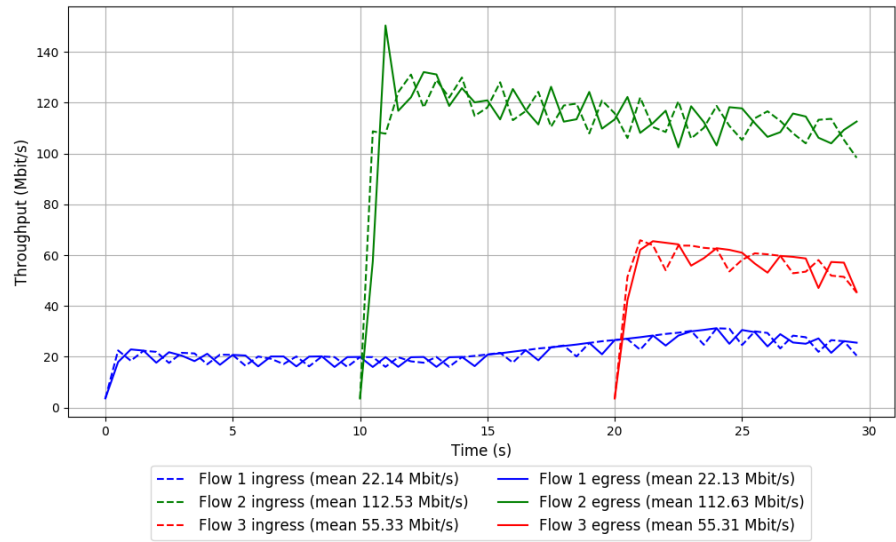
-- Flow 3:

Average throughput: 55.31 Mbit/s

95th percentile per-packet one-way delay: 54.865 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link

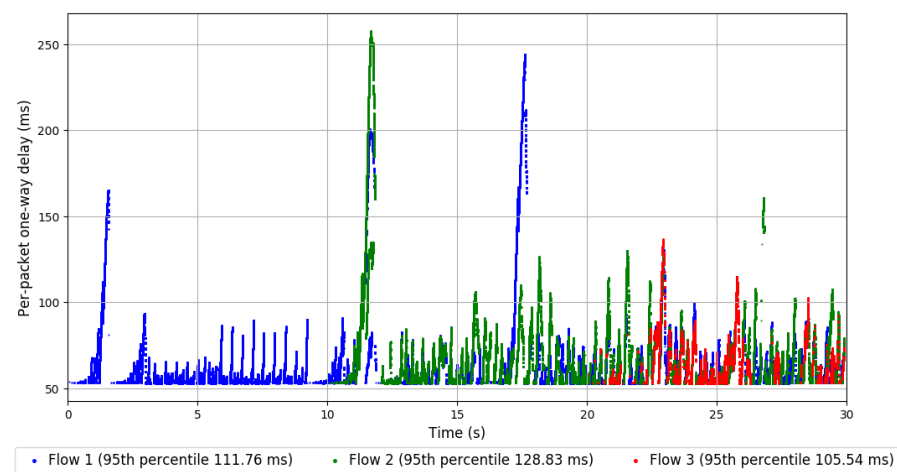
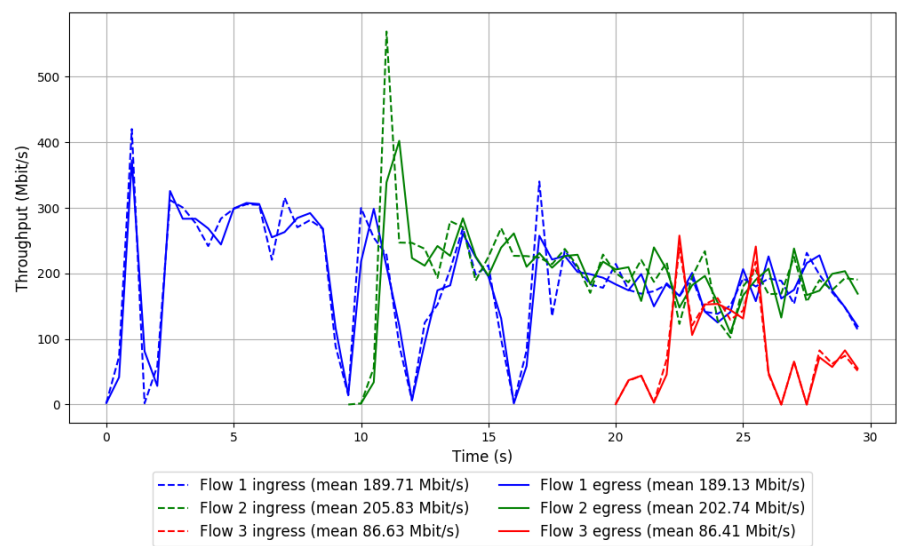


```
Run 1: Statistics of Verus

Start at: 2018-02-14 08:36:40
End at: 2018-02-14 08:37:10

# Below is generated by plot.py at 2018-02-14 14:39:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 352.41 Mbit/s
95th percentile per-packet one-way delay: 121.029 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 189.13 Mbit/s
95th percentile per-packet one-way delay: 111.761 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 202.74 Mbit/s
95th percentile per-packet one-way delay: 128.833 ms
Loss rate: 1.45%
-- Flow 3:
Average throughput: 86.41 Mbit/s
95th percentile per-packet one-way delay: 105.542 ms
Loss rate: 0.24%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-02-14 08:54:03

End at: 2018-02-14 08:54:33

Below is generated by plot.py at 2018-02-14 14:39:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 355.99 Mbit/s

95th percentile per-packet one-way delay: 149.185 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 199.31 Mbit/s

95th percentile per-packet one-way delay: 127.834 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 161.83 Mbit/s

95th percentile per-packet one-way delay: 169.069 ms

Loss rate: 0.26%

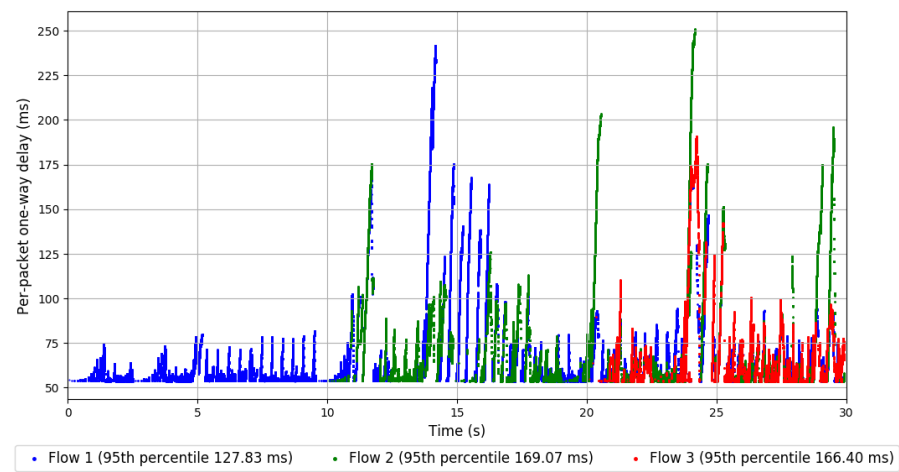
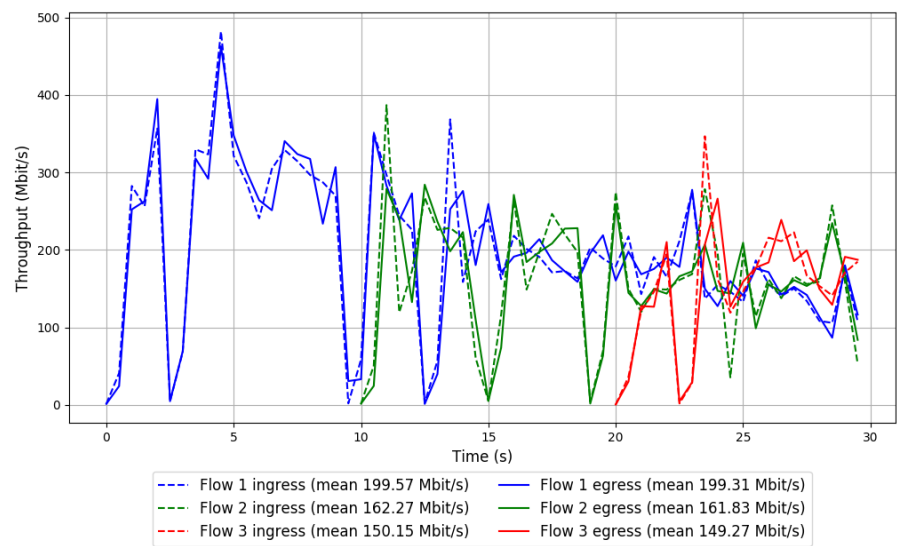
-- Flow 3:

Average throughput: 149.27 Mbit/s

95th percentile per-packet one-way delay: 166.397 ms

Loss rate: 0.61%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-02-14 09:11:32

End at: 2018-02-14 09:12:02

Below is generated by plot.py at 2018-02-14 14:40:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 374.83 Mbit/s

95th percentile per-packet one-way delay: 114.086 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 234.59 Mbit/s

95th percentile per-packet one-way delay: 114.305 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 129.16 Mbit/s

95th percentile per-packet one-way delay: 108.060 ms

Loss rate: 0.00%

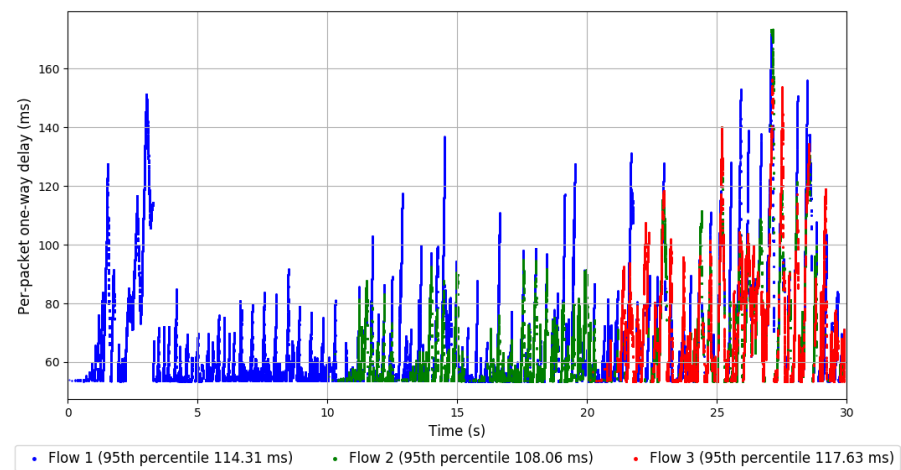
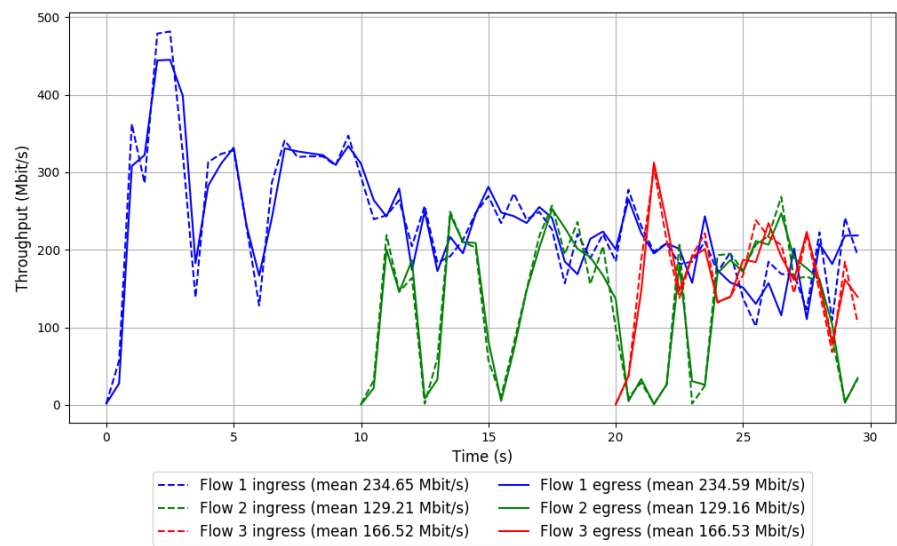
-- Flow 3:

Average throughput: 166.53 Mbit/s

95th percentile per-packet one-way delay: 117.633 ms

Loss rate: 0.00%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-02-14 09:29:13

End at: 2018-02-14 09:29:43

Below is generated by plot.py at 2018-02-14 14:40:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 363.83 Mbit/s

95th percentile per-packet one-way delay: 215.653 ms

Loss rate: 3.13%

-- Flow 1:

Average throughput: 220.34 Mbit/s

95th percentile per-packet one-way delay: 142.151 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 174.70 Mbit/s

95th percentile per-packet one-way delay: 294.035 ms

Loss rate: 7.70%

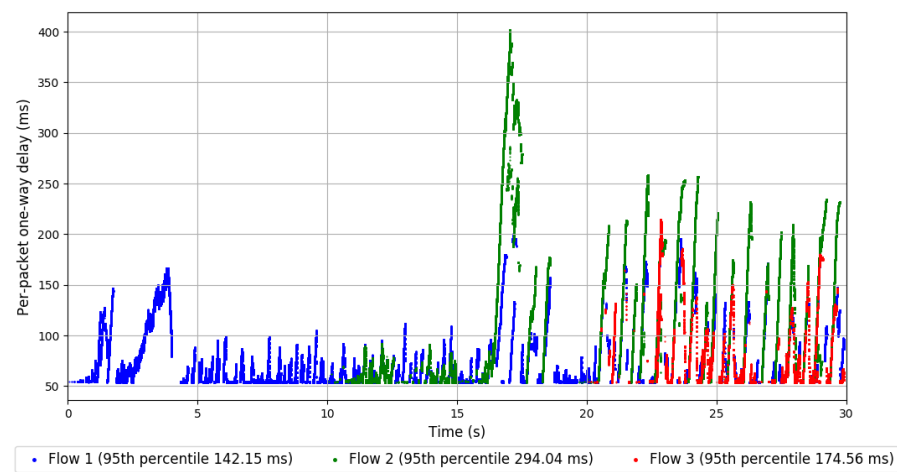
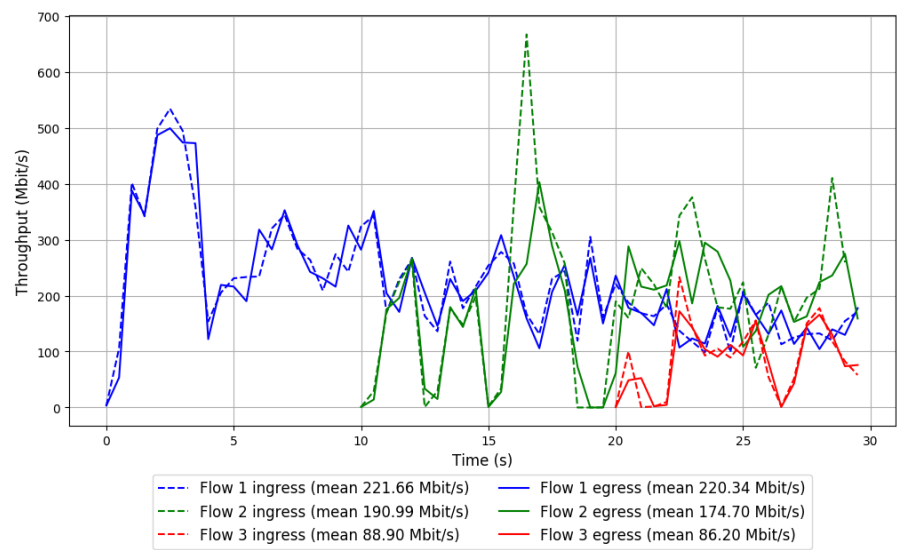
-- Flow 3:

Average throughput: 86.20 Mbit/s

95th percentile per-packet one-way delay: 174.564 ms

Loss rate: 3.02%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-02-14 09:46:27

End at: 2018-02-14 09:46:57

Below is generated by plot.py at 2018-02-14 14:40:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 328.51 Mbit/s

95th percentile per-packet one-way delay: 172.535 ms

Loss rate: 3.07%

-- Flow 1:

Average throughput: 191.44 Mbit/s

95th percentile per-packet one-way delay: 141.703 ms

Loss rate: 0.96%

-- Flow 2:

Average throughput: 173.58 Mbit/s

95th percentile per-packet one-way delay: 290.325 ms

Loss rate: 6.80%

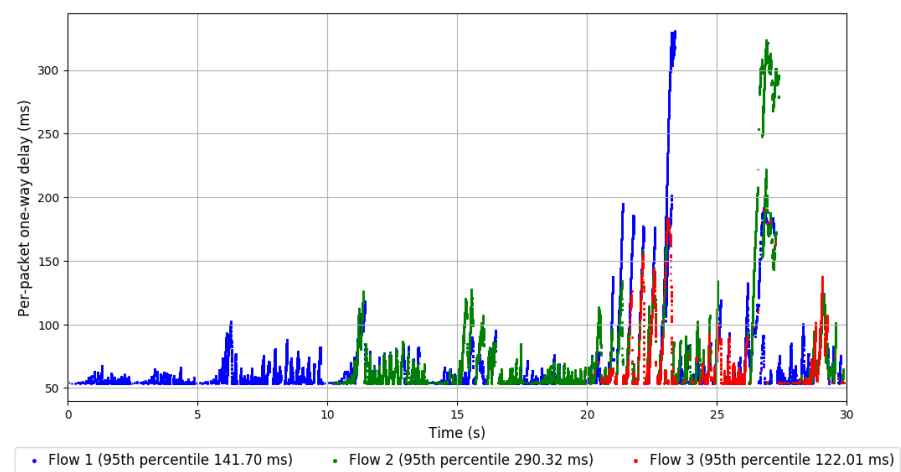
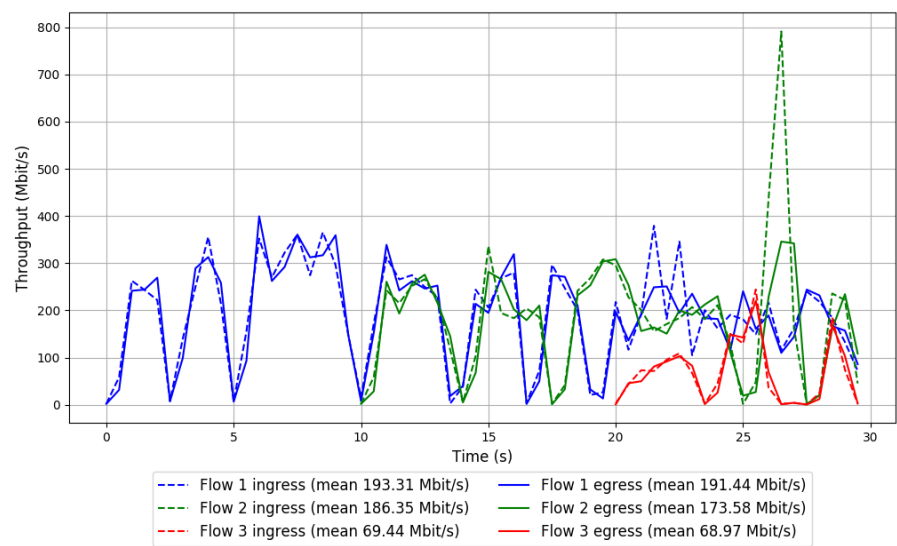
-- Flow 3:

Average throughput: 68.97 Mbit/s

95th percentile per-packet one-way delay: 122.007 ms

Loss rate: 0.67%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-02-14 10:04:21

End at: 2018-02-14 10:04:51

Below is generated by plot.py at 2018-02-14 14:40:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 354.65 Mbit/s

95th percentile per-packet one-way delay: 102.781 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 193.03 Mbit/s

95th percentile per-packet one-way delay: 99.491 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 192.68 Mbit/s

95th percentile per-packet one-way delay: 102.846 ms

Loss rate: 0.00%

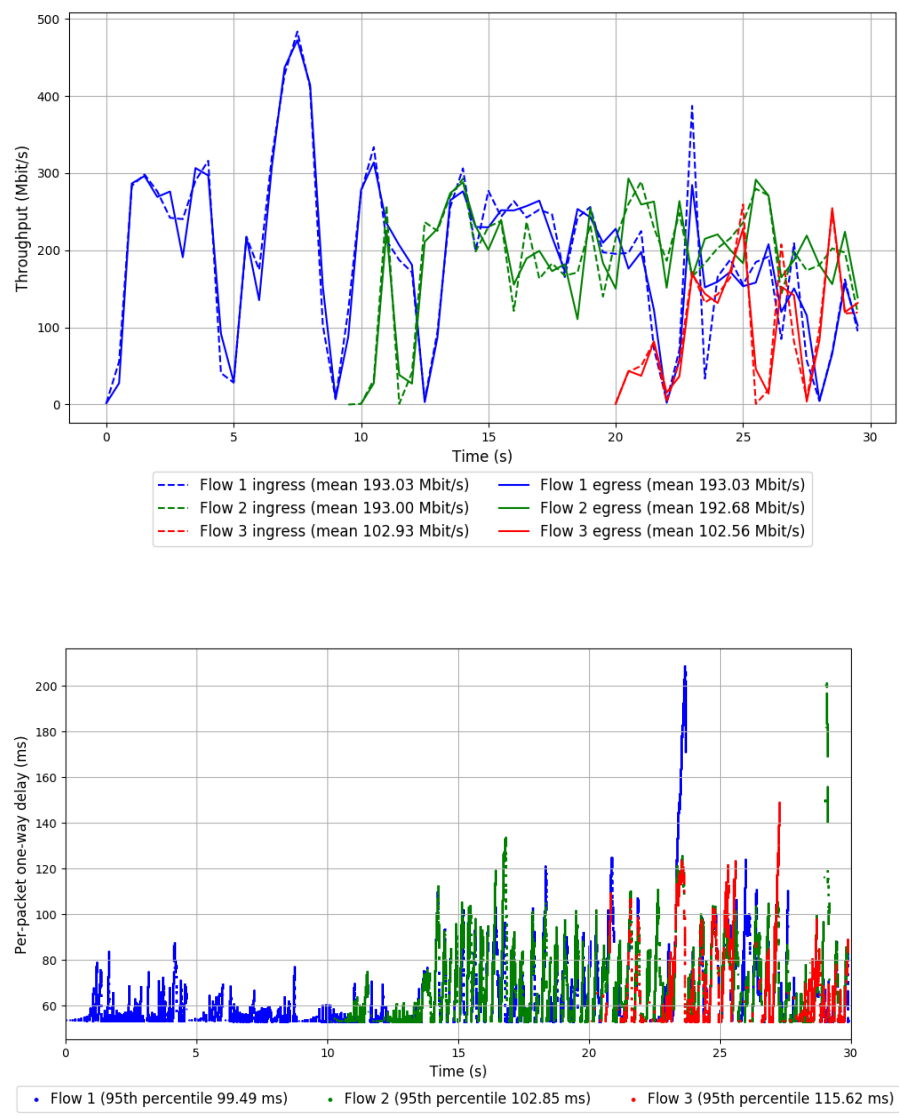
-- Flow 3:

Average throughput: 102.56 Mbit/s

95th percentile per-packet one-way delay: 115.619 ms

Loss rate: 0.00%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-02-14 10:21:49

End at: 2018-02-14 10:22:19

Below is generated by plot.py at 2018-02-14 14:40:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 335.78 Mbit/s

95th percentile per-packet one-way delay: 138.308 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 152.94 Mbit/s

95th percentile per-packet one-way delay: 146.528 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 208.30 Mbit/s

95th percentile per-packet one-way delay: 137.128 ms

Loss rate: 1.22%

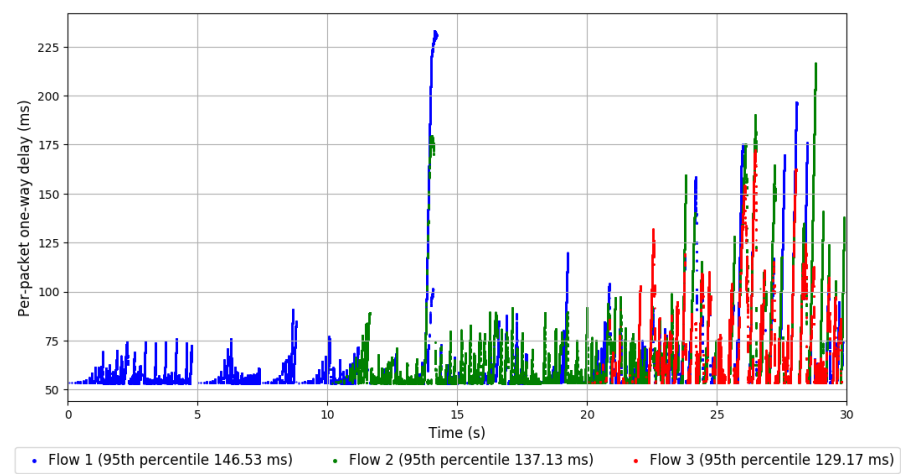
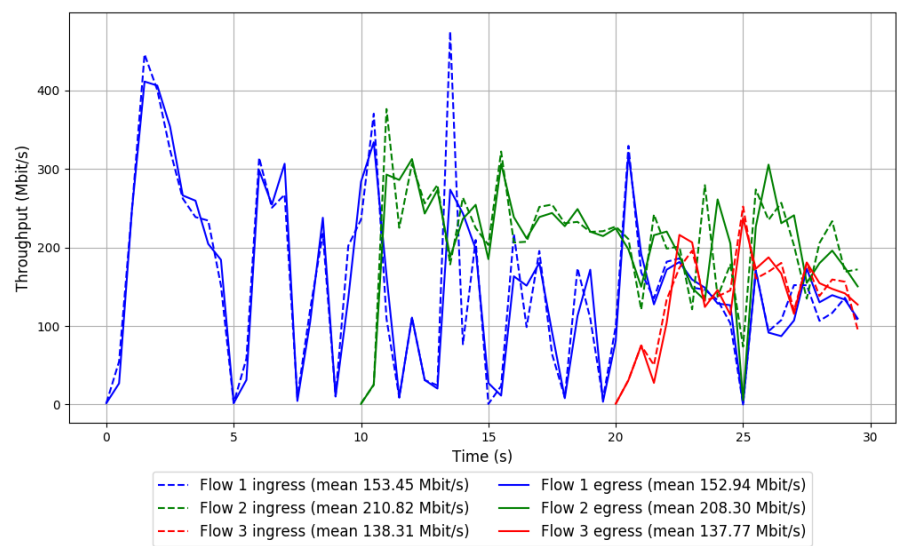
-- Flow 3:

Average throughput: 137.77 Mbit/s

95th percentile per-packet one-way delay: 129.174 ms

Loss rate: 0.39%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-02-14 10:39:27

End at: 2018-02-14 10:39:57

Below is generated by plot.py at 2018-02-14 14:42:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 372.24 Mbit/s

95th percentile per-packet one-way delay: 163.217 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 205.12 Mbit/s

95th percentile per-packet one-way delay: 150.266 ms

Loss rate: 1.05%

-- Flow 2:

Average throughput: 157.24 Mbit/s

95th percentile per-packet one-way delay: 128.854 ms

Loss rate: 0.12%

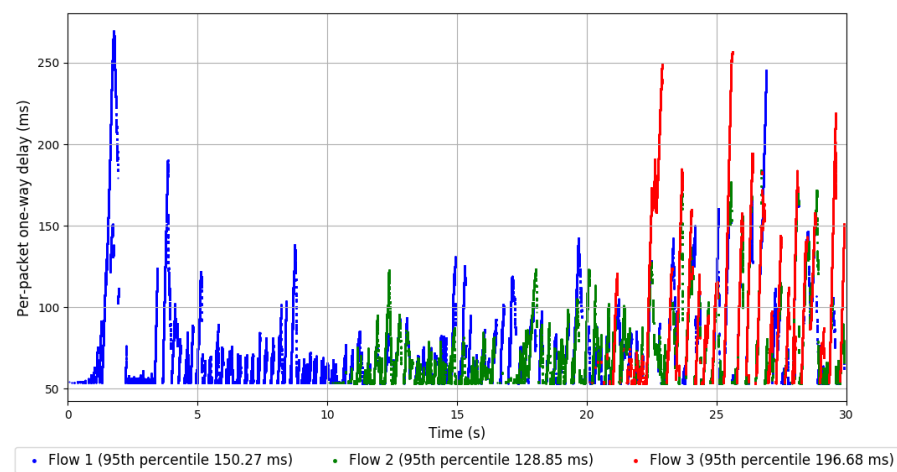
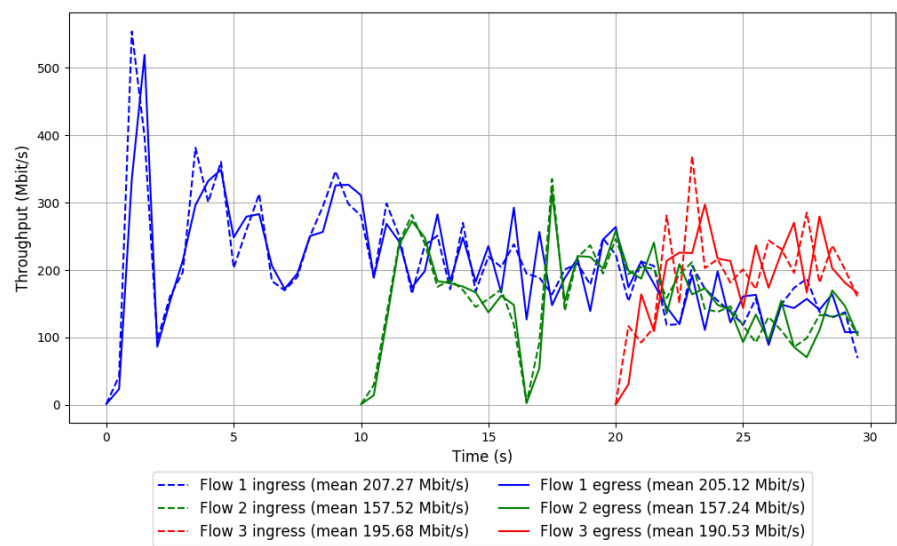
-- Flow 3:

Average throughput: 190.53 Mbit/s

95th percentile per-packet one-way delay: 196.675 ms

Loss rate: 2.39%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-02-14 10:57:01

End at: 2018-02-14 10:57:31

Below is generated by plot.py at 2018-02-14 14:45:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 357.87 Mbit/s

95th percentile per-packet one-way delay: 141.908 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 227.80 Mbit/s

95th percentile per-packet one-way delay: 138.479 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 132.97 Mbit/s

95th percentile per-packet one-way delay: 140.169 ms

Loss rate: 0.83%

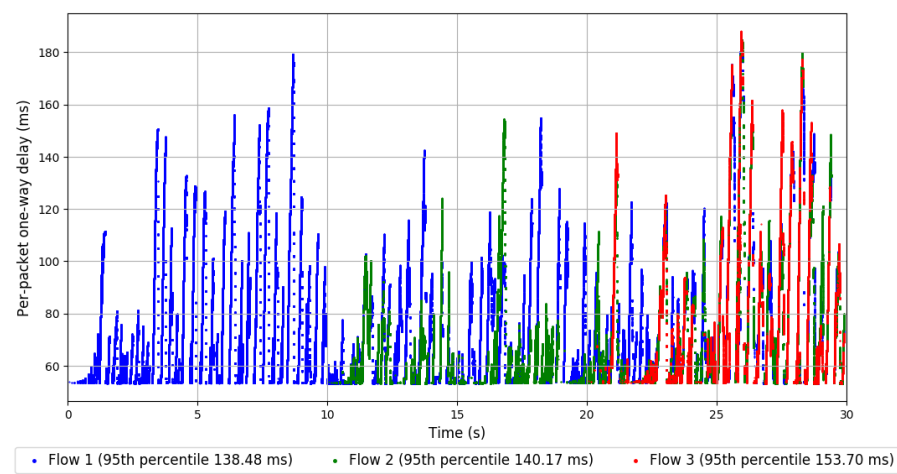
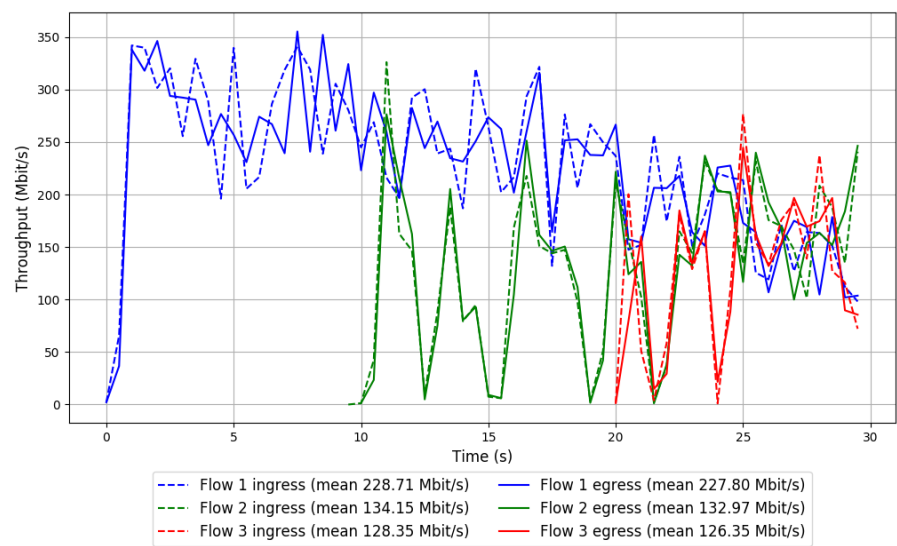
-- Flow 3:

Average throughput: 126.35 Mbit/s

95th percentile per-packet one-way delay: 153.697 ms

Loss rate: 1.60%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-02-14 11:14:29

End at: 2018-02-14 11:14:59

Below is generated by plot.py at 2018-02-14 14:46:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 344.23 Mbit/s

95th percentile per-packet one-way delay: 151.769 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 220.19 Mbit/s

95th percentile per-packet one-way delay: 135.722 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 131.50 Mbit/s

95th percentile per-packet one-way delay: 133.064 ms

Loss rate: 0.56%

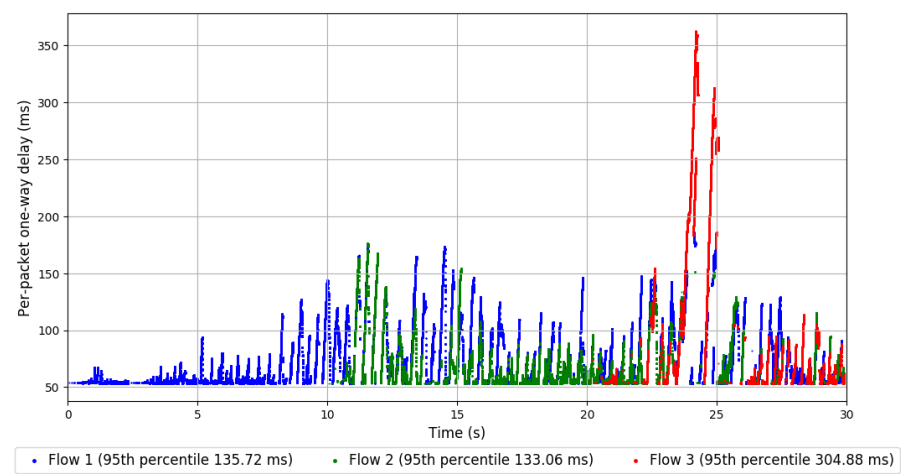
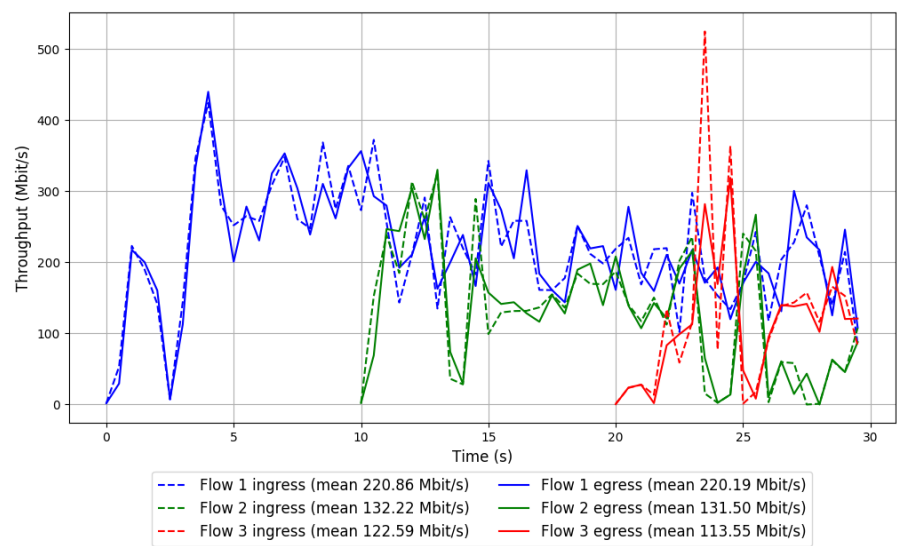
-- Flow 3:

Average throughput: 113.55 Mbit/s

95th percentile per-packet one-way delay: 304.876 ms

Loss rate: 7.44%

Run 10: Report of Verus — Data Link

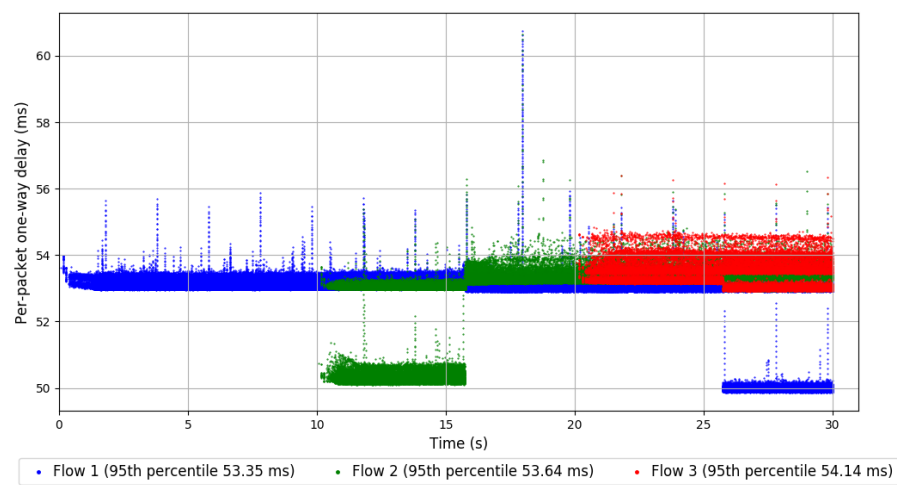
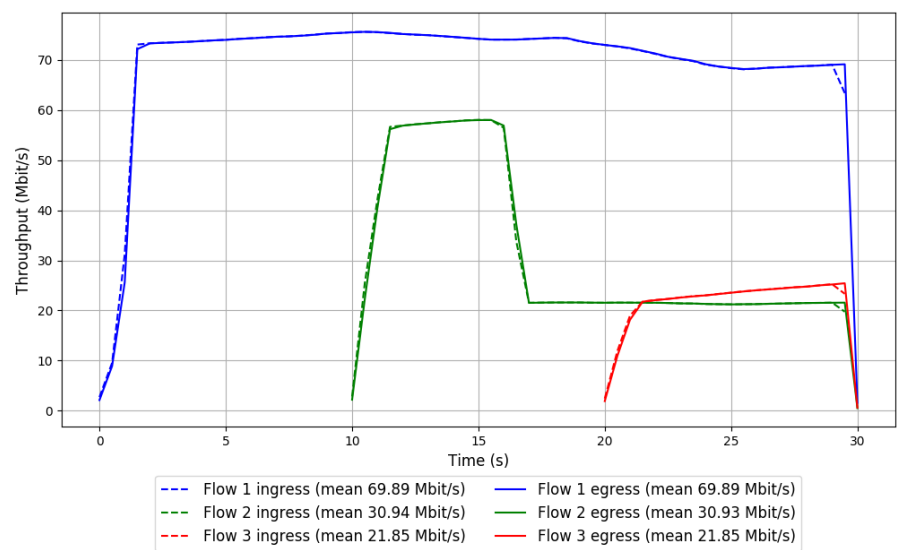


```
Run 1: Statistics of Copa

Start at: 2018-02-14 08:37:42
End at: 2018-02-14 08:38:12

# Below is generated by plot.py at 2018-02-14 14:46:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.74 Mbit/s
95th percentile per-packet one-way delay: 53.509 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 69.89 Mbit/s
95th percentile per-packet one-way delay: 53.354 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 30.93 Mbit/s
95th percentile per-packet one-way delay: 53.640 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 21.85 Mbit/s
95th percentile per-packet one-way delay: 54.136 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-02-14 08:55:05

End at: 2018-02-14 08:55:35

Below is generated by plot.py at 2018-02-14 14:46:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 106.94 Mbit/s

95th percentile per-packet one-way delay: 53.608 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 62.80 Mbit/s

95th percentile per-packet one-way delay: 53.581 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 48.11 Mbit/s

95th percentile per-packet one-way delay: 53.612 ms

Loss rate: 0.01%

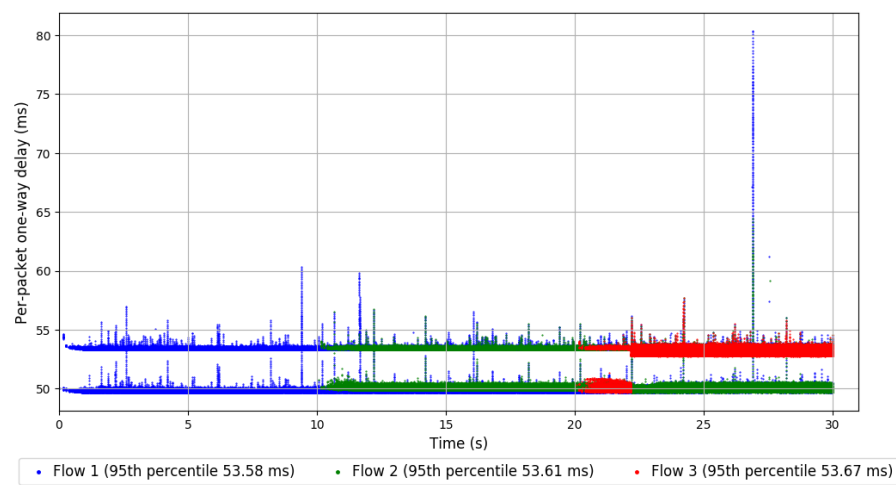
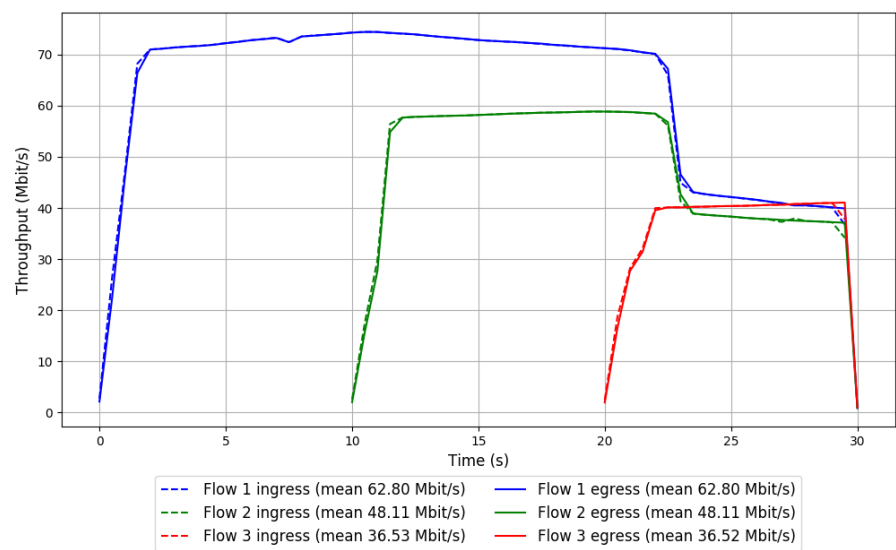
-- Flow 3:

Average throughput: 36.52 Mbit/s

95th percentile per-packet one-way delay: 53.666 ms

Loss rate: 0.03%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-02-14 09:12:36

End at: 2018-02-14 09:13:06

Below is generated by plot.py at 2018-02-14 14:46:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 61.17 Mbit/s

95th percentile per-packet one-way delay: 53.633 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 31.86 Mbit/s

95th percentile per-packet one-way delay: 53.636 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 23.64 Mbit/s

95th percentile per-packet one-way delay: 53.587 ms

Loss rate: 0.00%

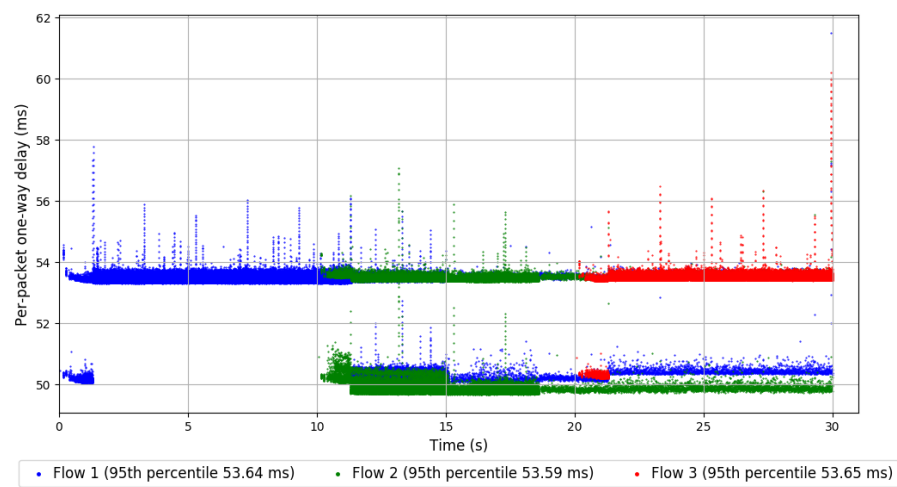
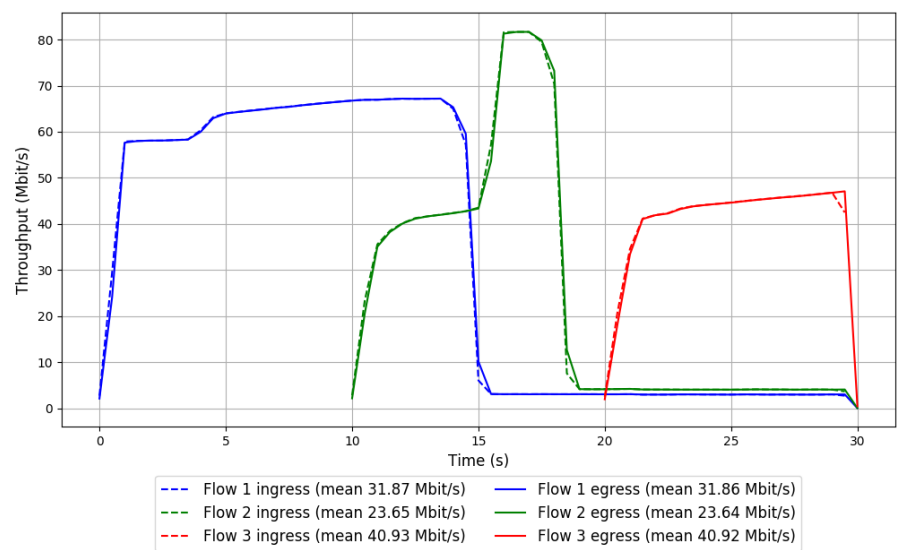
-- Flow 3:

Average throughput: 40.92 Mbit/s

95th percentile per-packet one-way delay: 53.653 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-02-14 09:30:16

End at: 2018-02-14 09:30:46

Below is generated by plot.py at 2018-02-14 14:46:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 102.11 Mbit/s

95th percentile per-packet one-way delay: 53.804 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 58.19 Mbit/s

95th percentile per-packet one-way delay: 53.811 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 46.53 Mbit/s

95th percentile per-packet one-way delay: 53.792 ms

Loss rate: 0.01%

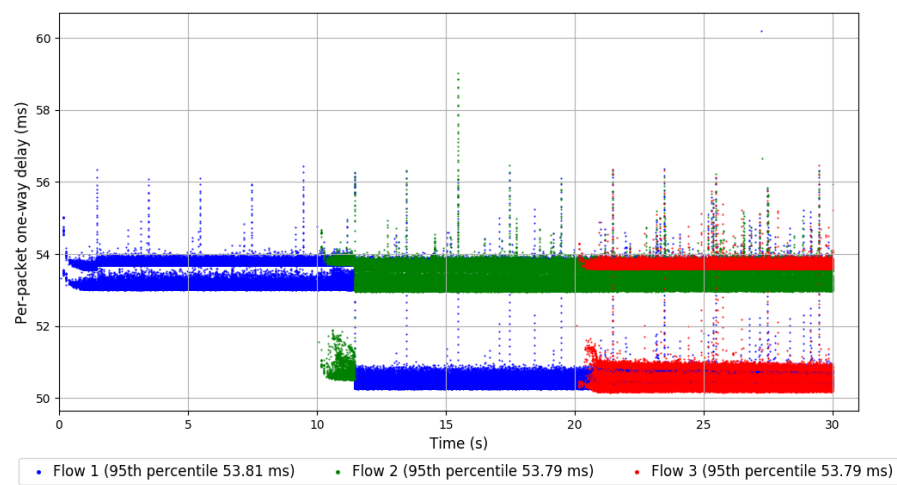
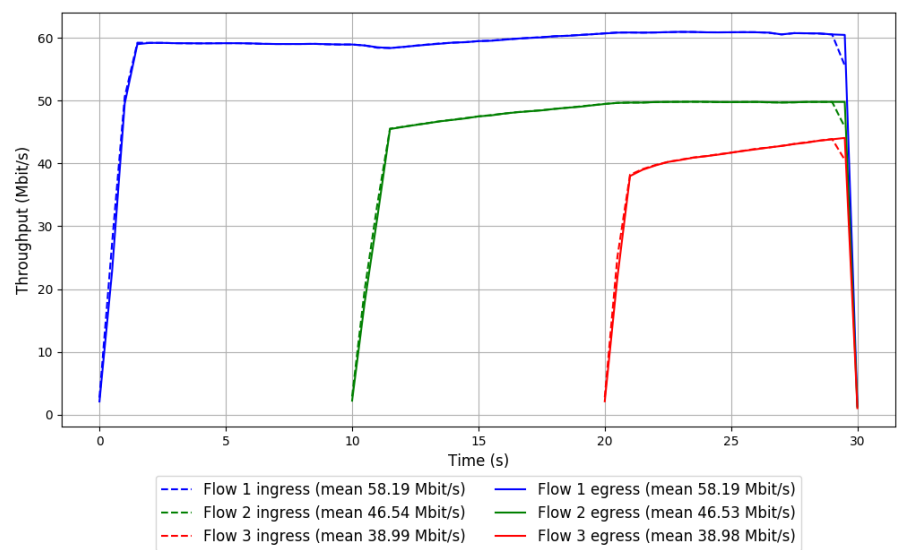
-- Flow 3:

Average throughput: 38.98 Mbit/s

95th percentile per-packet one-way delay: 53.793 ms

Loss rate: 0.03%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-02-14 09:47:28

End at: 2018-02-14 09:47:58

Below is generated by plot.py at 2018-02-14 14:46:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.79 Mbit/s

95th percentile per-packet one-way delay: 53.691 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 52.35 Mbit/s

95th percentile per-packet one-way delay: 53.576 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 32.40 Mbit/s

95th percentile per-packet one-way delay: 53.929 ms

Loss rate: 0.01%

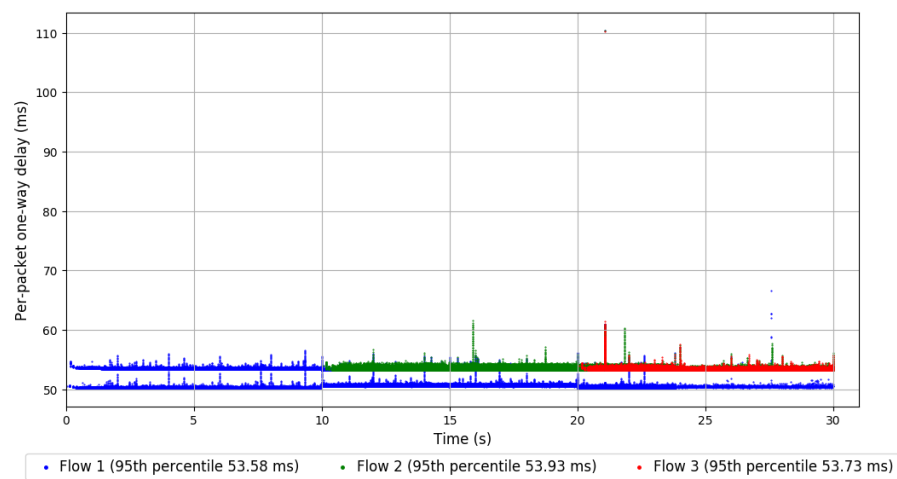
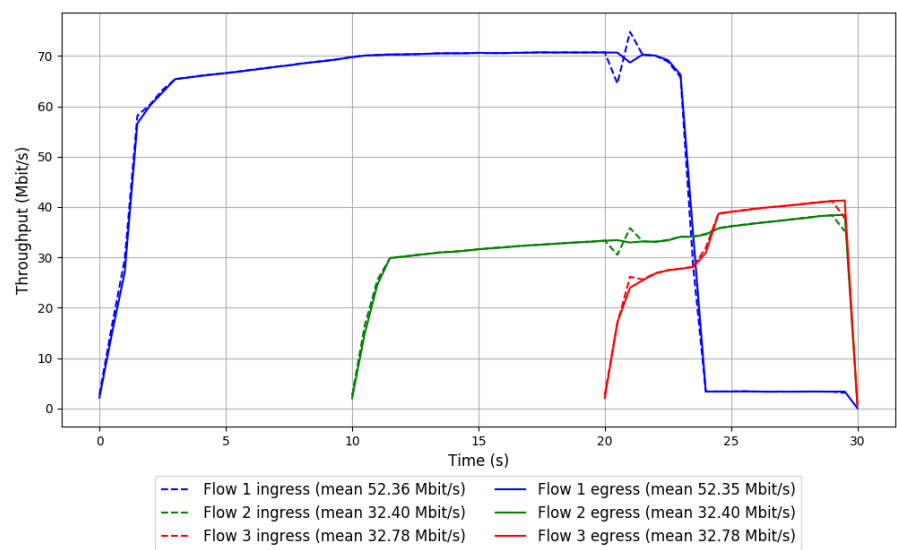
-- Flow 3:

Average throughput: 32.78 Mbit/s

95th percentile per-packet one-way delay: 53.727 ms

Loss rate: 0.03%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-02-14 10:05:24

End at: 2018-02-14 10:05:54

Below is generated by plot.py at 2018-02-14 14:46:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.07 Mbit/s

95th percentile per-packet one-way delay: 53.474 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 32.57 Mbit/s

95th percentile per-packet one-way delay: 53.537 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.17 Mbit/s

95th percentile per-packet one-way delay: 53.305 ms

Loss rate: 0.00%

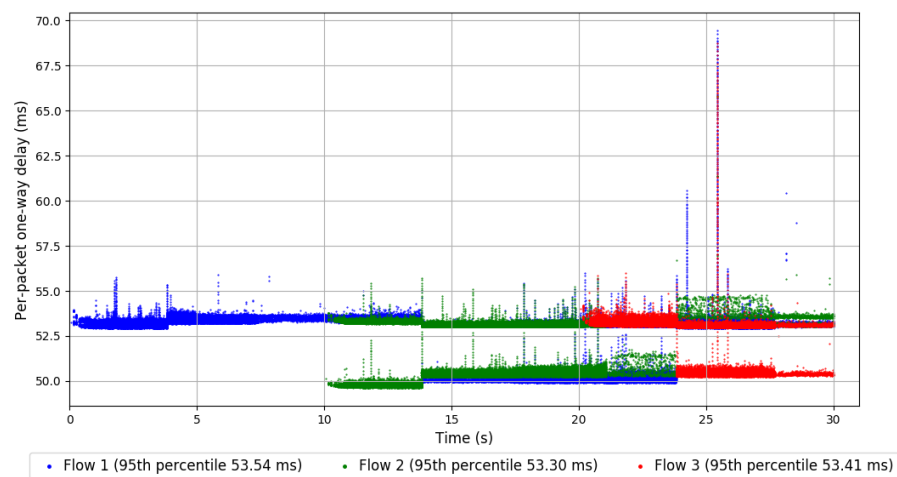
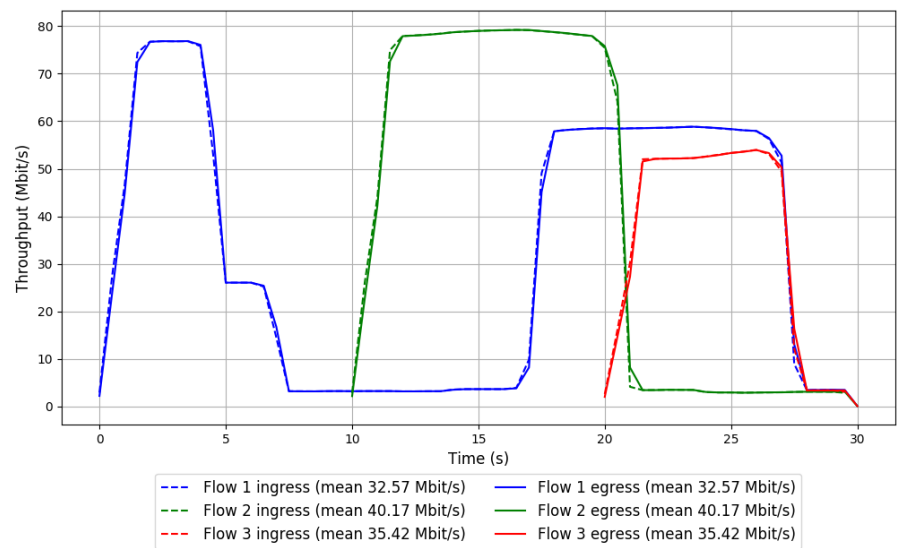
-- Flow 3:

Average throughput: 35.42 Mbit/s

95th percentile per-packet one-way delay: 53.409 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-02-14 10:22:50

End at: 2018-02-14 10:23:21

Below is generated by plot.py at 2018-02-14 14:46:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 104.12 Mbit/s

95th percentile per-packet one-way delay: 53.641 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 58.02 Mbit/s

95th percentile per-packet one-way delay: 53.616 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 45.15 Mbit/s

95th percentile per-packet one-way delay: 53.761 ms

Loss rate: 0.01%

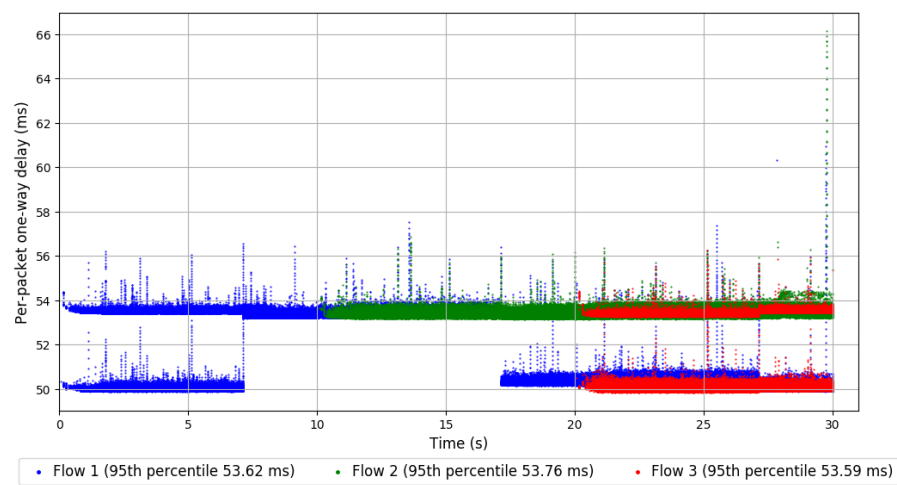
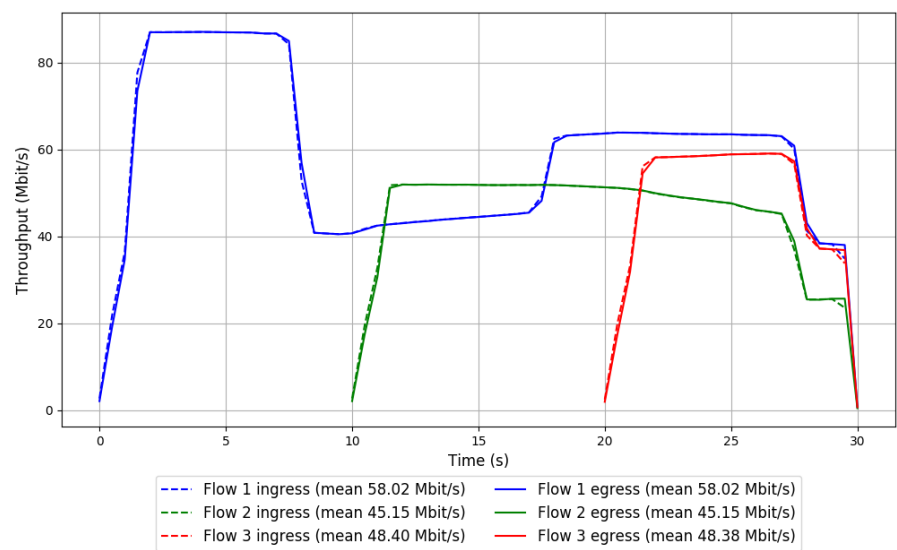
-- Flow 3:

Average throughput: 48.38 Mbit/s

95th percentile per-packet one-way delay: 53.589 ms

Loss rate: 0.02%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-02-14 10:40:31

End at: 2018-02-14 10:41:01

Below is generated by plot.py at 2018-02-14 14:46:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.65 Mbit/s

95th percentile per-packet one-way delay: 53.627 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 27.13 Mbit/s

95th percentile per-packet one-way delay: 53.702 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 75.14 Mbit/s

95th percentile per-packet one-way delay: 53.593 ms

Loss rate: 0.01%

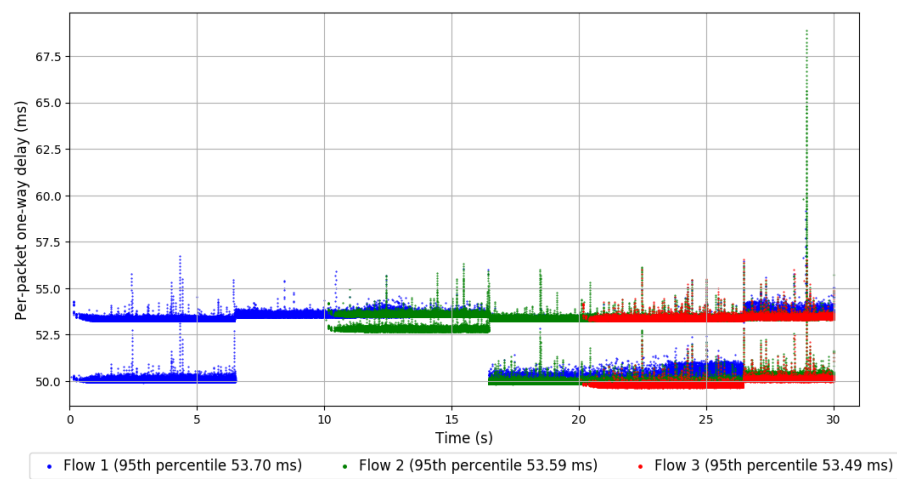
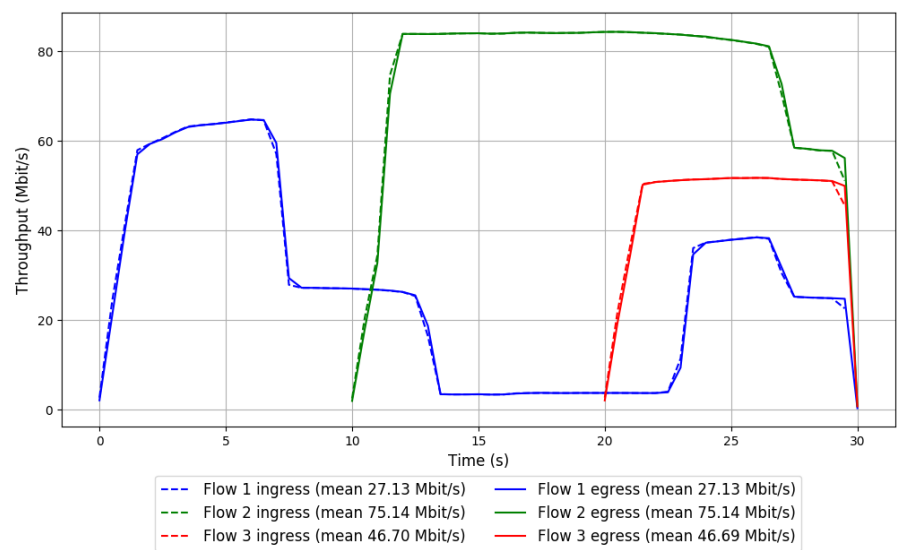
-- Flow 3:

Average throughput: 46.69 Mbit/s

95th percentile per-packet one-way delay: 53.490 ms

Loss rate: 0.02%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-02-14 10:58:04

End at: 2018-02-14 10:58:34

Below is generated by plot.py at 2018-02-14 14:46:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.88 Mbit/s

95th percentile per-packet one-way delay: 53.522 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 67.48 Mbit/s

95th percentile per-packet one-way delay: 53.453 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 37.93 Mbit/s

95th percentile per-packet one-way delay: 53.599 ms

Loss rate: 0.01%

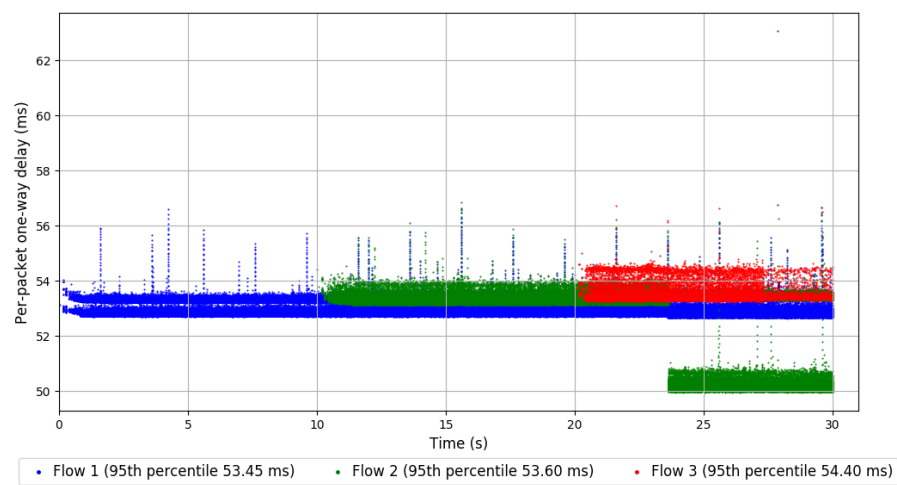
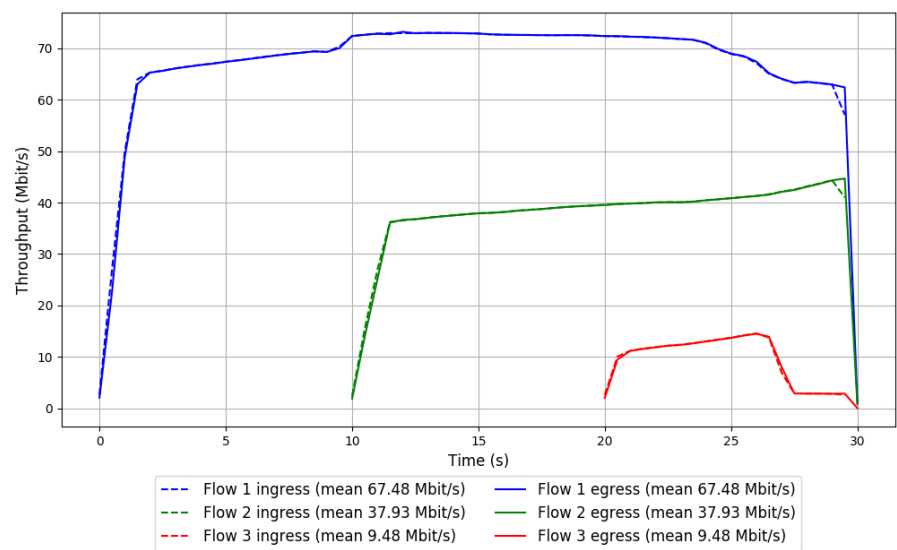
-- Flow 3:

Average throughput: 9.48 Mbit/s

95th percentile per-packet one-way delay: 54.404 ms

Loss rate: 0.01%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-02-14 11:15:31

End at: 2018-02-14 11:16:01

Below is generated by plot.py at 2018-02-14 14:46:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.31 Mbit/s

95th percentile per-packet one-way delay: 53.566 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 44.56 Mbit/s

95th percentile per-packet one-way delay: 53.578 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 41.65 Mbit/s

95th percentile per-packet one-way delay: 53.589 ms

Loss rate: 0.00%

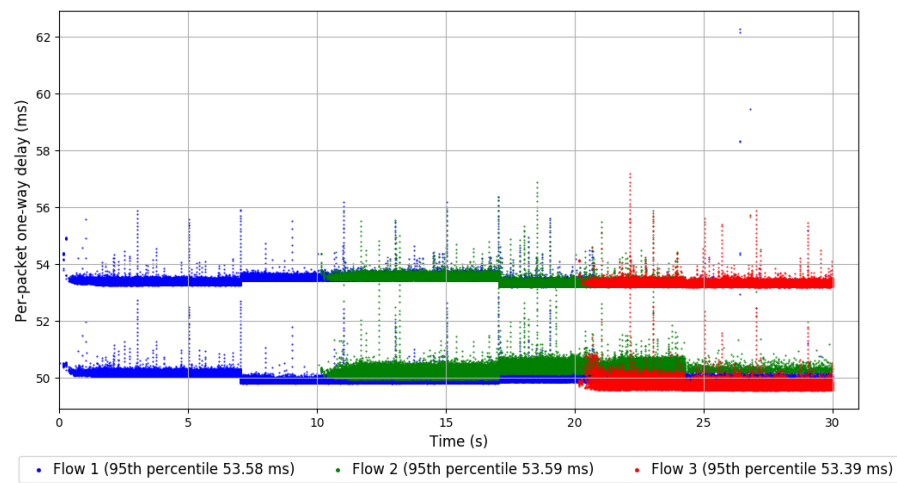
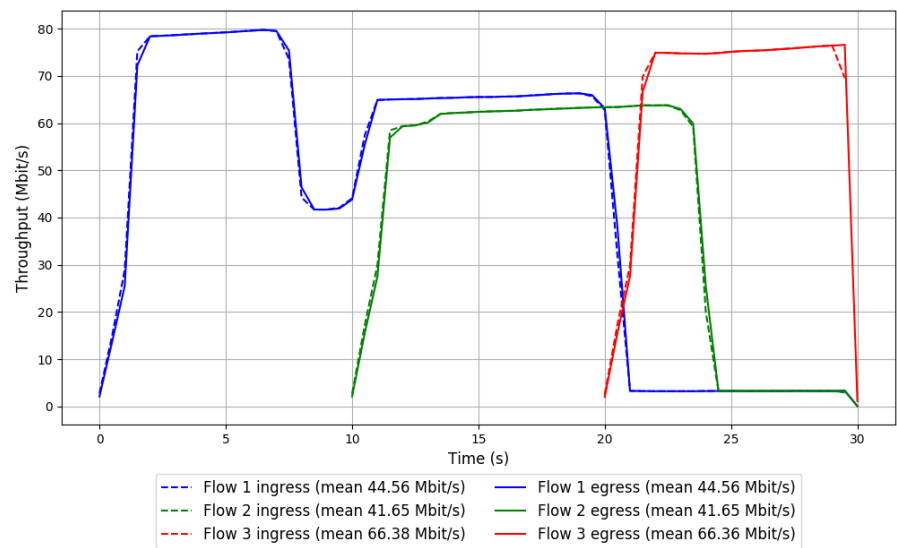
-- Flow 3:

Average throughput: 66.36 Mbit/s

95th percentile per-packet one-way delay: 53.394 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

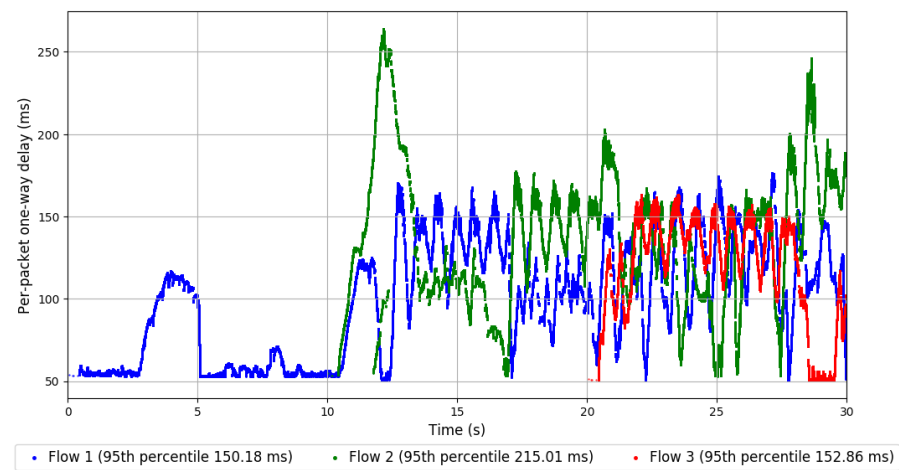
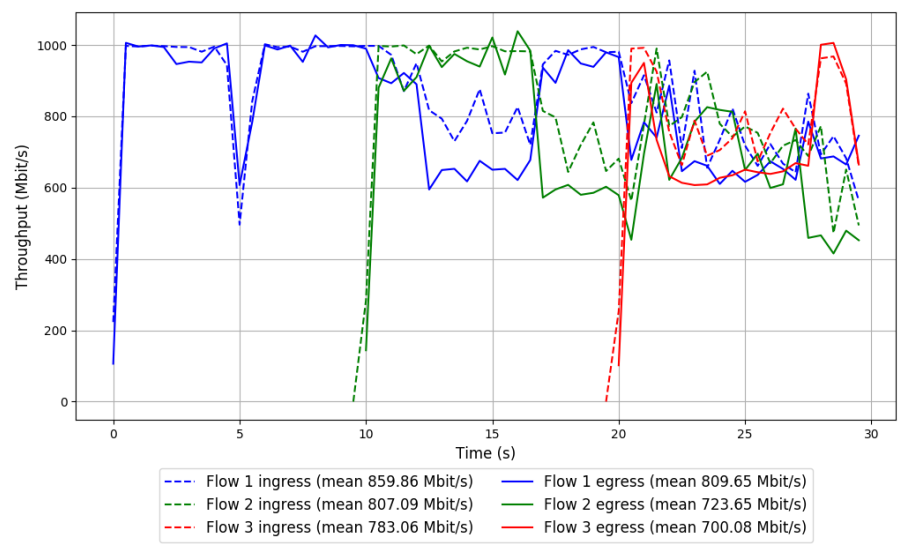


```
Run 1: Statistics of FillP

Start at: 2018-02-14 08:31:25
End at: 2018-02-14 08:31:56

# Below is generated by plot.py at 2018-02-14 15:12:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1523.85 Mbit/s
95th percentile per-packet one-way delay: 171.130 ms
Loss rate: 8.06%
-- Flow 1:
Average throughput: 809.65 Mbit/s
95th percentile per-packet one-way delay: 150.175 ms
Loss rate: 5.85%
-- Flow 2:
Average throughput: 723.65 Mbit/s
95th percentile per-packet one-way delay: 215.015 ms
Loss rate: 10.36%
-- Flow 3:
Average throughput: 700.08 Mbit/s
95th percentile per-packet one-way delay: 152.860 ms
Loss rate: 10.60%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-02-14 08:48:41

End at: 2018-02-14 08:49:11

Below is generated by plot.py at 2018-02-14 15:13:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 1560.29 Mbit/s

95th percentile per-packet one-way delay: 151.096 ms

Loss rate: 6.40%

-- Flow 1:

Average throughput: 829.75 Mbit/s

95th percentile per-packet one-way delay: 149.298 ms

Loss rate: 6.45%

-- Flow 2:

Average throughput: 765.80 Mbit/s

95th percentile per-packet one-way delay: 147.996 ms

Loss rate: 4.38%

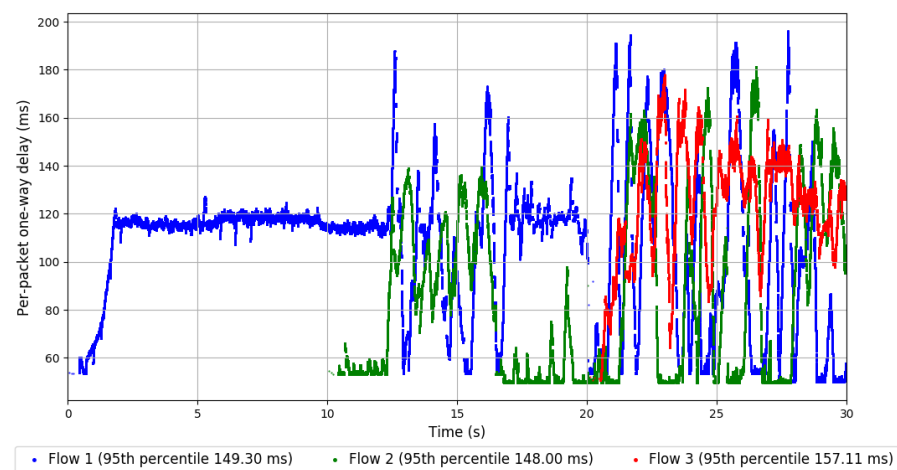
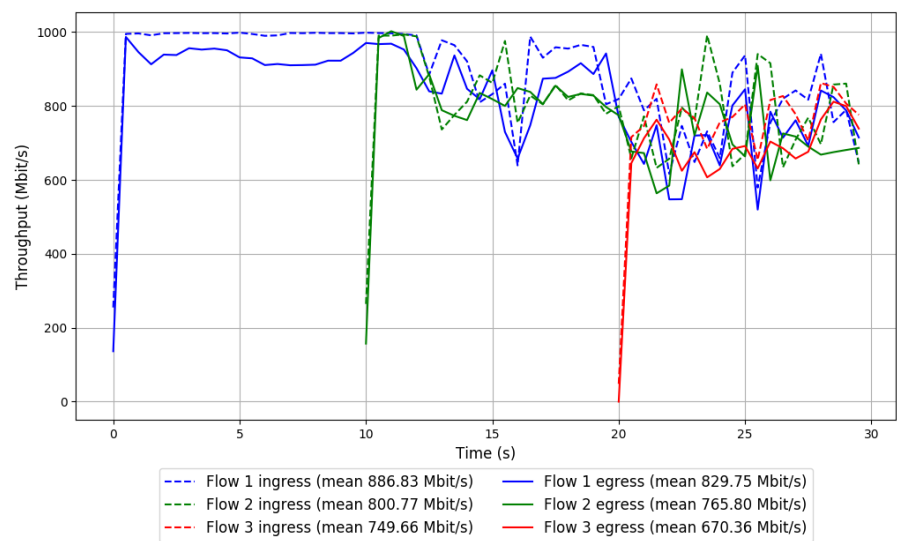
-- Flow 3:

Average throughput: 670.36 Mbit/s

95th percentile per-packet one-way delay: 157.106 ms

Loss rate: 10.59%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-02-14 09:06:05

End at: 2018-02-14 09:06:35

Below is generated by plot.py at 2018-02-14 15:14:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 1542.52 Mbit/s

95th percentile per-packet one-way delay: 160.359 ms

Loss rate: 9.53%

-- Flow 1:

Average throughput: 797.32 Mbit/s

95th percentile per-packet one-way delay: 148.693 ms

Loss rate: 8.71%

-- Flow 2:

Average throughput: 795.06 Mbit/s

95th percentile per-packet one-way delay: 159.426 ms

Loss rate: 8.94%

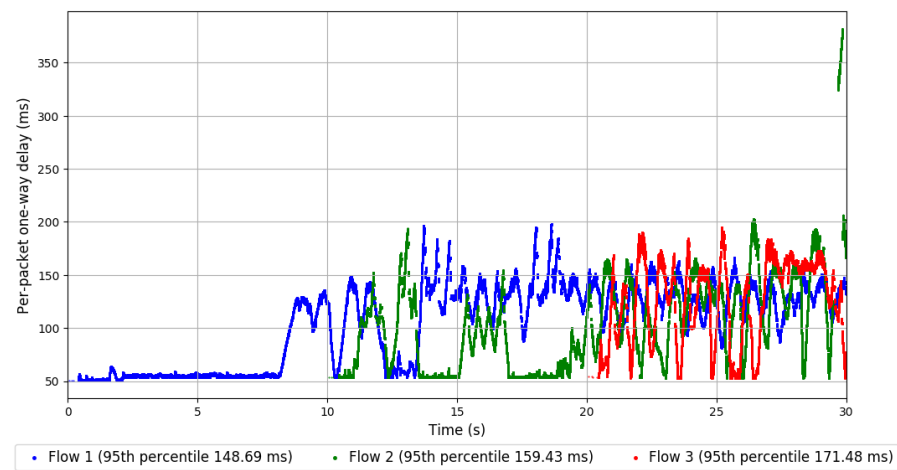
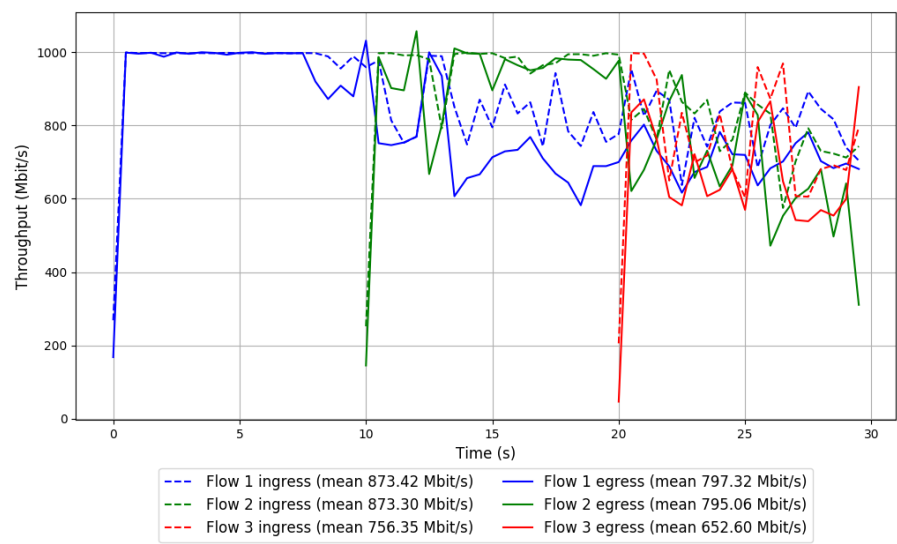
-- Flow 3:

Average throughput: 652.60 Mbit/s

95th percentile per-packet one-way delay: 171.481 ms

Loss rate: 13.75%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-02-14 09:23:44

End at: 2018-02-14 09:24:14

Below is generated by plot.py at 2018-02-14 15:14:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 1506.44 Mbit/s

95th percentile per-packet one-way delay: 236.235 ms

Loss rate: 5.52%

-- Flow 1:

Average throughput: 818.20 Mbit/s

95th percentile per-packet one-way delay: 151.944 ms

Loss rate: 5.29%

-- Flow 2:

Average throughput: 714.97 Mbit/s

95th percentile per-packet one-way delay: 252.640 ms

Loss rate: 4.24%

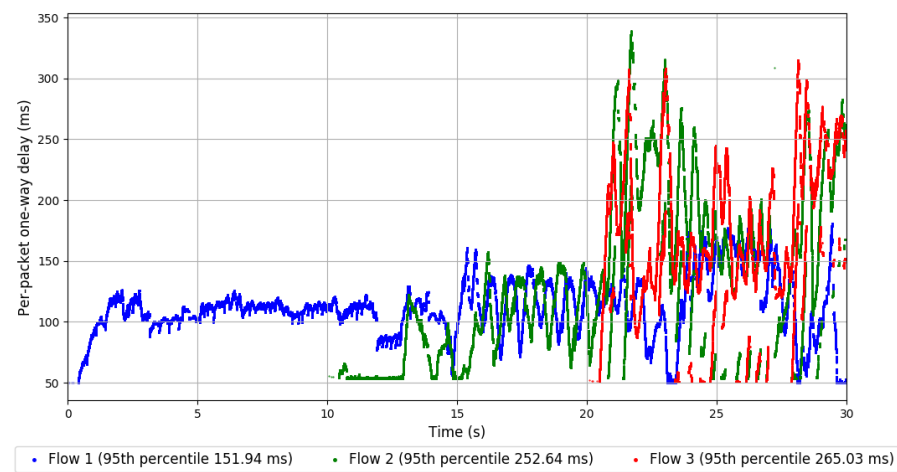
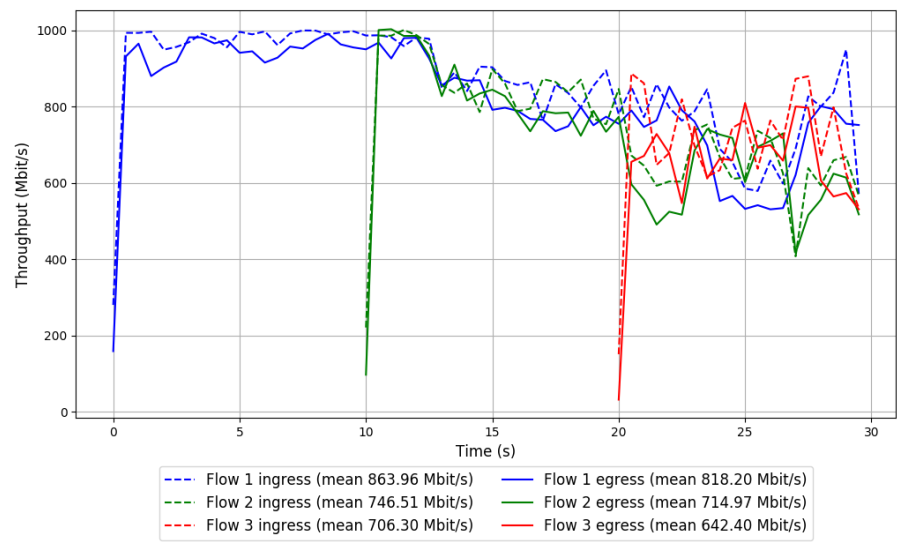
-- Flow 3:

Average throughput: 642.40 Mbit/s

95th percentile per-packet one-way delay: 265.033 ms

Loss rate: 9.06%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-02-14 09:41:19

End at: 2018-02-14 09:41:49

Below is generated by plot.py at 2018-02-14 15:14:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 1448.12 Mbit/s

95th percentile per-packet one-way delay: 222.825 ms

Loss rate: 6.14%

-- Flow 1:

Average throughput: 781.48 Mbit/s

95th percentile per-packet one-way delay: 223.580 ms

Loss rate: 7.38%

-- Flow 2:

Average throughput: 696.15 Mbit/s

95th percentile per-packet one-way delay: 161.340 ms

Loss rate: 4.56%

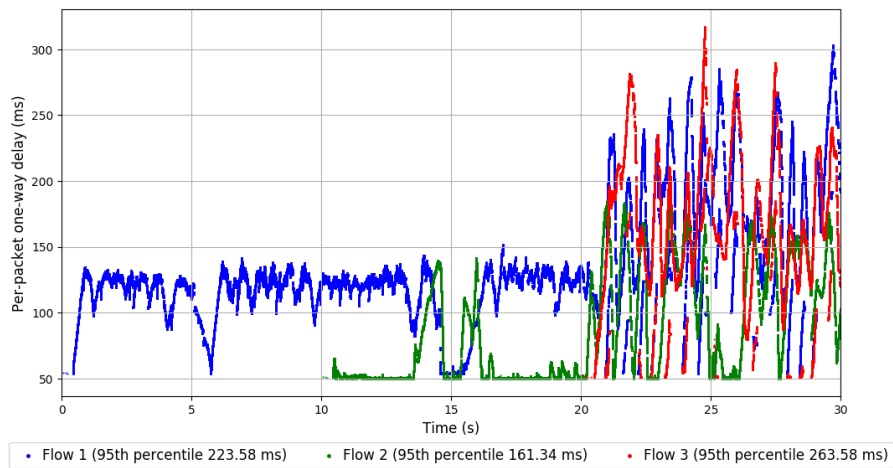
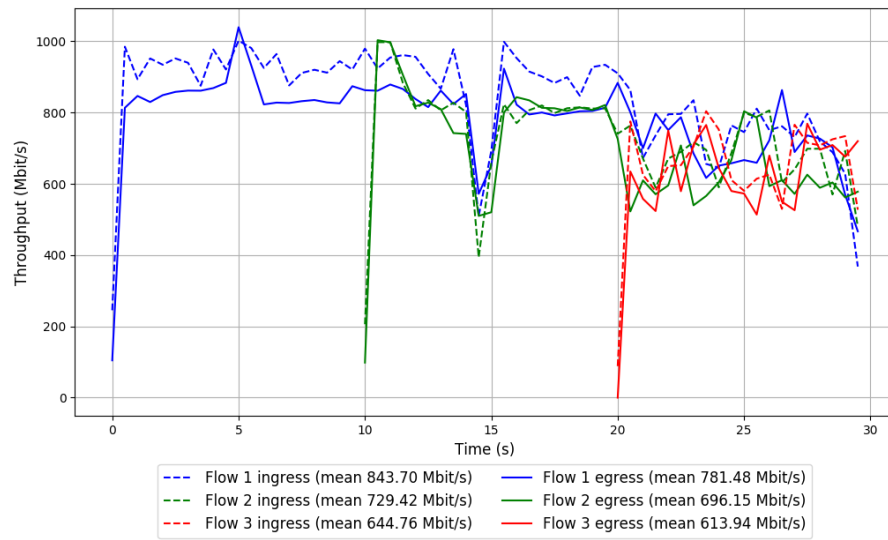
-- Flow 3:

Average throughput: 613.94 Mbit/s

95th percentile per-packet one-way delay: 263.582 ms

Loss rate: 4.79%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-02-14 09:58:48

End at: 2018-02-14 09:59:18

Below is generated by plot.py at 2018-02-14 15:15:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 1613.40 Mbit/s

95th percentile per-packet one-way delay: 161.912 ms

Loss rate: 4.74%

-- Flow 1:

Average throughput: 850.15 Mbit/s

95th percentile per-packet one-way delay: 168.841 ms

Loss rate: 1.77%

-- Flow 2:

Average throughput: 808.54 Mbit/s

95th percentile per-packet one-way delay: 148.395 ms

Loss rate: 7.46%

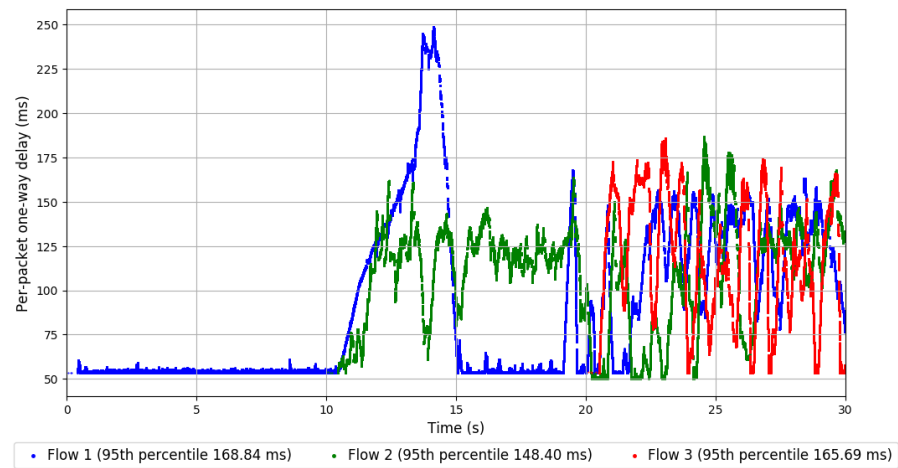
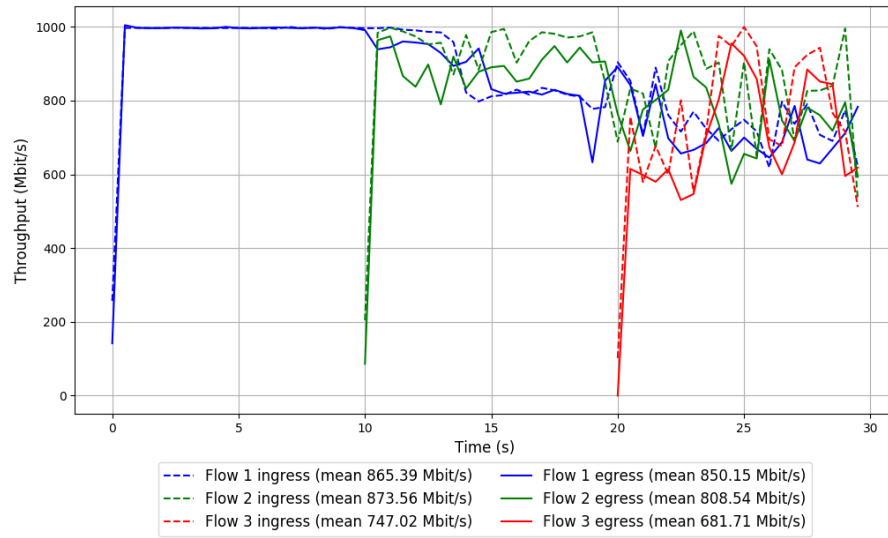
-- Flow 3:

Average throughput: 681.71 Mbit/s

95th percentile per-packet one-way delay: 165.689 ms

Loss rate: 8.77%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-02-14 10:16:33

End at: 2018-02-14 10:17:03

Below is generated by plot.py at 2018-02-14 15:15:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 1417.27 Mbit/s

95th percentile per-packet one-way delay: 221.724 ms

Loss rate: 5.20%

-- Flow 1:

Average throughput: 727.86 Mbit/s

95th percentile per-packet one-way delay: 216.672 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 741.99 Mbit/s

95th percentile per-packet one-way delay: 155.020 ms

Loss rate: 8.64%

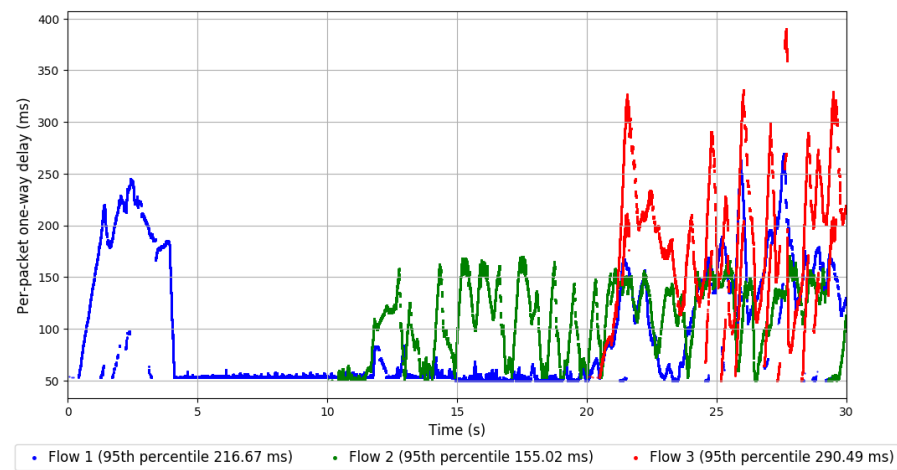
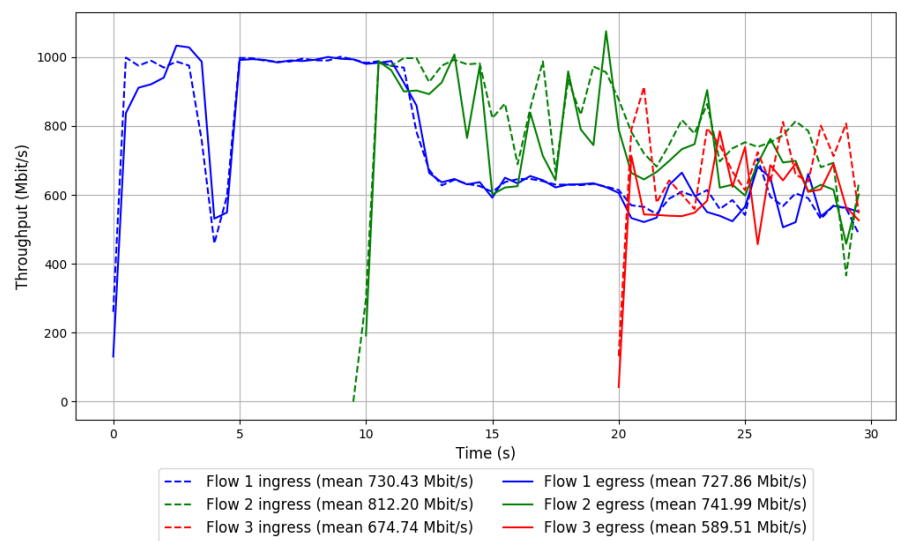
-- Flow 3:

Average throughput: 589.51 Mbit/s

95th percentile per-packet one-way delay: 290.489 ms

Loss rate: 12.65%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-02-14 10:34:10

End at: 2018-02-14 10:34:40

Below is generated by plot.py at 2018-02-14 15:16:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 1571.93 Mbit/s

95th percentile per-packet one-way delay: 163.847 ms

Loss rate: 8.92%

-- Flow 1:

Average throughput: 877.08 Mbit/s

95th percentile per-packet one-way delay: 146.043 ms

Loss rate: 5.60%

-- Flow 2:

Average throughput: 713.51 Mbit/s

95th percentile per-packet one-way delay: 174.810 ms

Loss rate: 12.34%

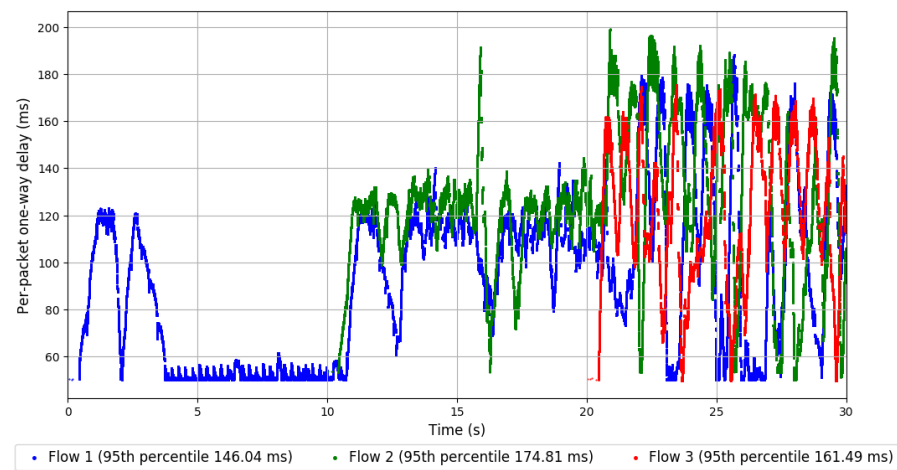
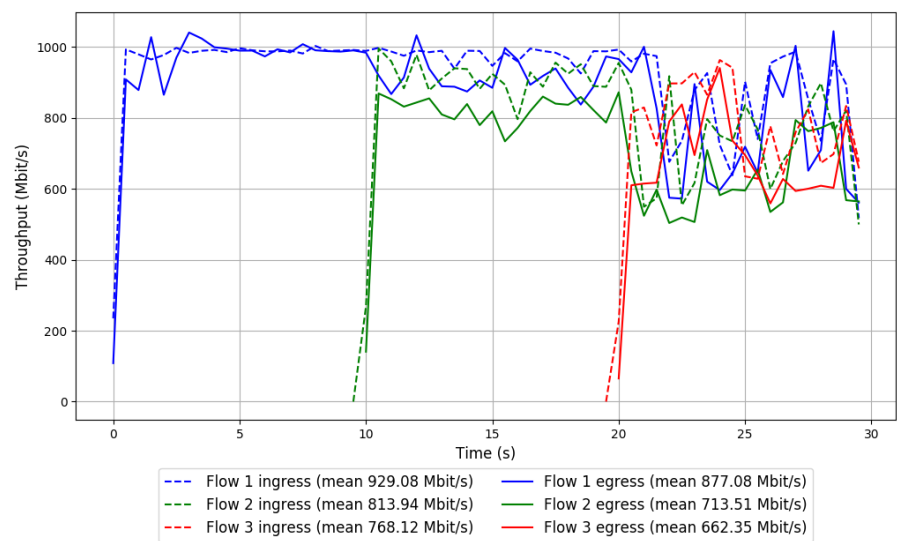
-- Flow 3:

Average throughput: 662.35 Mbit/s

95th percentile per-packet one-way delay: 161.492 ms

Loss rate: 13.77%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-02-14 10:51:38

End at: 2018-02-14 10:52:08

Below is generated by plot.py at 2018-02-14 15:42:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 1592.28 Mbit/s

95th percentile per-packet one-way delay: 256.125 ms

Loss rate: 5.84%

-- Flow 1:

Average throughput: 833.59 Mbit/s

95th percentile per-packet one-way delay: 258.309 ms

Loss rate: 5.79%

-- Flow 2:

Average throughput: 824.65 Mbit/s

95th percentile per-packet one-way delay: 142.439 ms

Loss rate: 4.22%

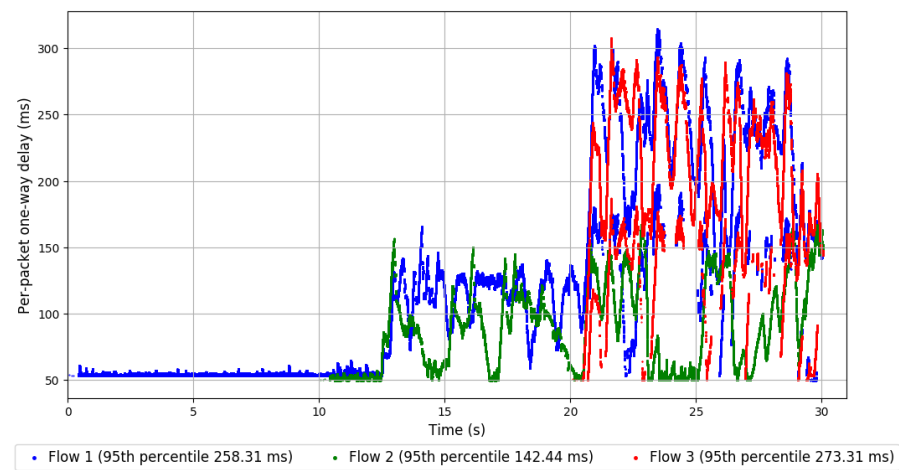
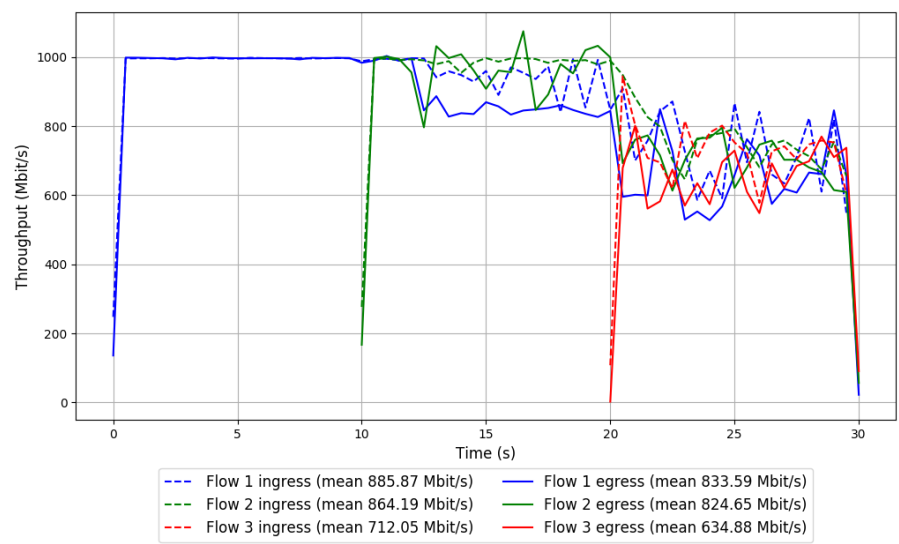
-- Flow 3:

Average throughput: 634.88 Mbit/s

95th percentile per-packet one-way delay: 273.310 ms

Loss rate: 9.99%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-02-14 11:09:14

End at: 2018-02-14 11:09:44

Below is generated by plot.py at 2018-02-14 15:42:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 1597.92 Mbit/s

95th percentile per-packet one-way delay: 151.609 ms

Loss rate: 6.33%

-- Flow 1:

Average throughput: 895.95 Mbit/s

95th percentile per-packet one-way delay: 147.685 ms

Loss rate: 4.14%

-- Flow 2:

Average throughput: 683.89 Mbit/s

95th percentile per-packet one-way delay: 148.404 ms

Loss rate: 8.37%

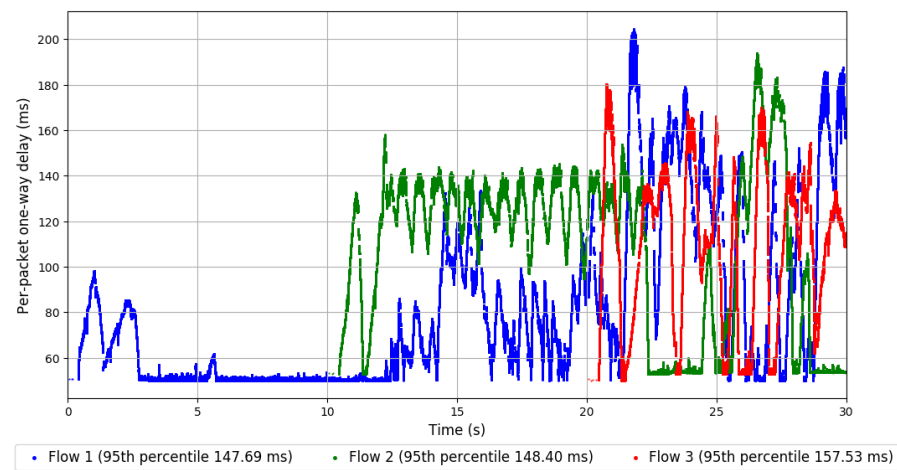
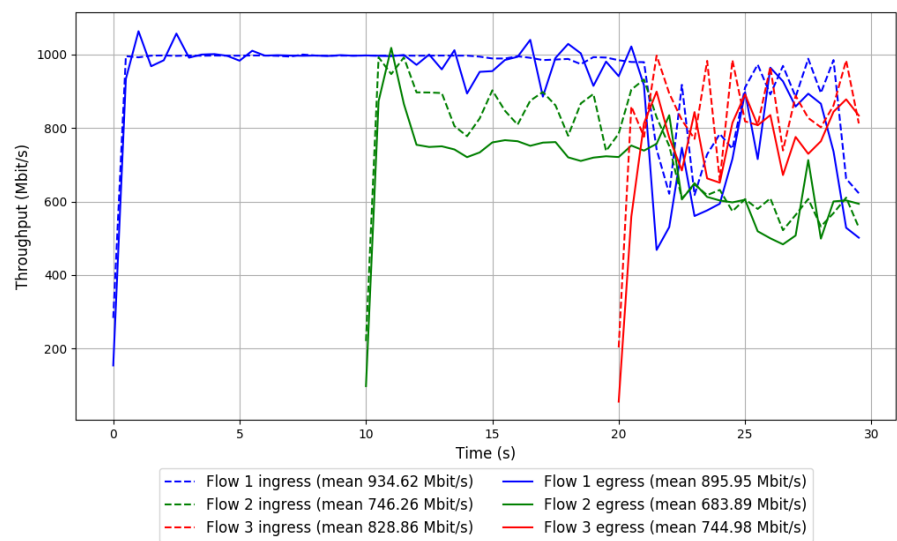
-- Flow 3:

Average throughput: 744.98 Mbit/s

95th percentile per-packet one-way delay: 157.531 ms

Loss rate: 10.11%

Run 10: Report of FillP — Data Link

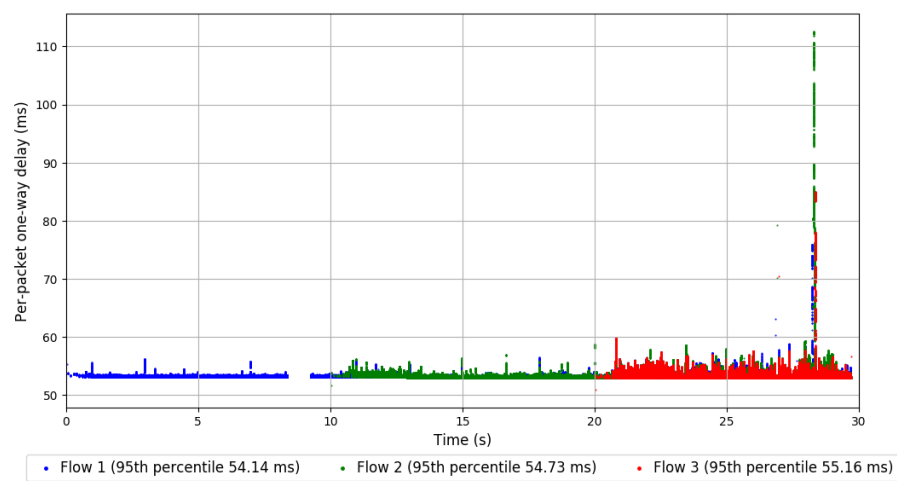
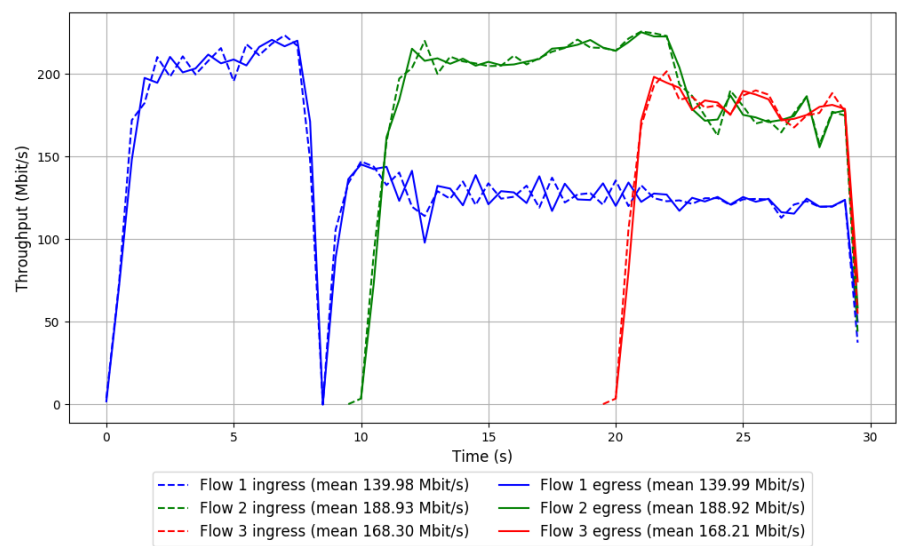


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-14 08:33:04
End at: 2018-02-14 08:33:34

# Below is generated by plot.py at 2018-02-14 15:42:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 320.19 Mbit/s
95th percentile per-packet one-way delay: 54.625 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 139.99 Mbit/s
95th percentile per-packet one-way delay: 54.137 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 188.92 Mbit/s
95th percentile per-packet one-way delay: 54.728 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 168.21 Mbit/s
95th percentile per-packet one-way delay: 55.155 ms
Loss rate: 0.01%
```

Run 1: Report of Indigo-1-32 — Data Link

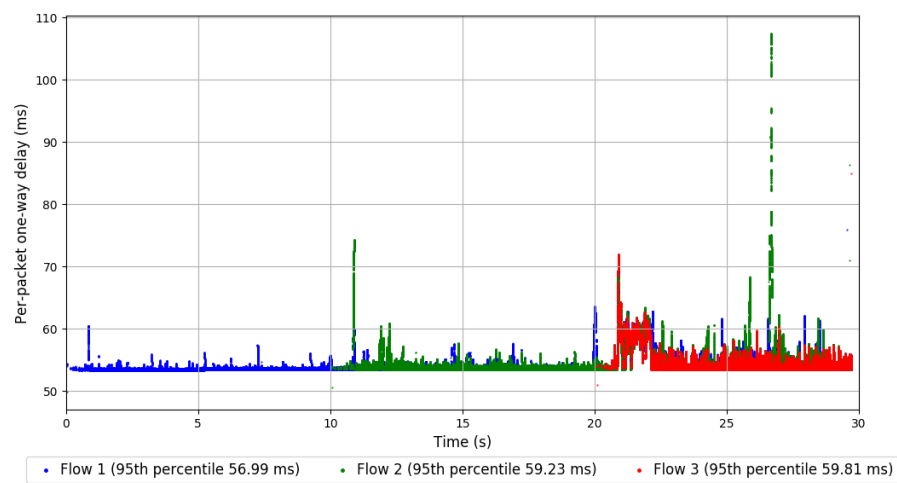
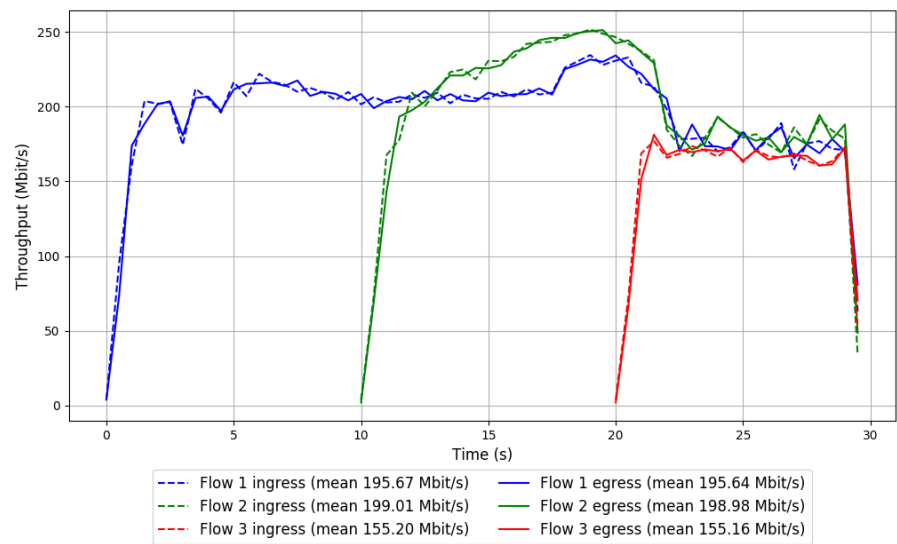


```
Run 2: Statistics of Indigo-1-32

Start at: 2018-02-14 08:50:22
End at: 2018-02-14 08:50:52

# Below is generated by plot.py at 2018-02-14 15:42:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 377.80 Mbit/s
95th percentile per-packet one-way delay: 58.741 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 195.64 Mbit/s
95th percentile per-packet one-way delay: 56.995 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 198.98 Mbit/s
95th percentile per-packet one-way delay: 59.235 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 155.16 Mbit/s
95th percentile per-packet one-way delay: 59.812 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-1-32 — Data Link



Run 3: Statistics of Indigo-1-32

Start at: 2018-02-14 09:07:42

End at: 2018-02-14 09:08:12

Below is generated by plot.py at 2018-02-14 15:42:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 381.89 Mbit/s

95th percentile per-packet one-way delay: 57.407 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 210.05 Mbit/s

95th percentile per-packet one-way delay: 56.851 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 185.07 Mbit/s

95th percentile per-packet one-way delay: 57.518 ms

Loss rate: 0.02%

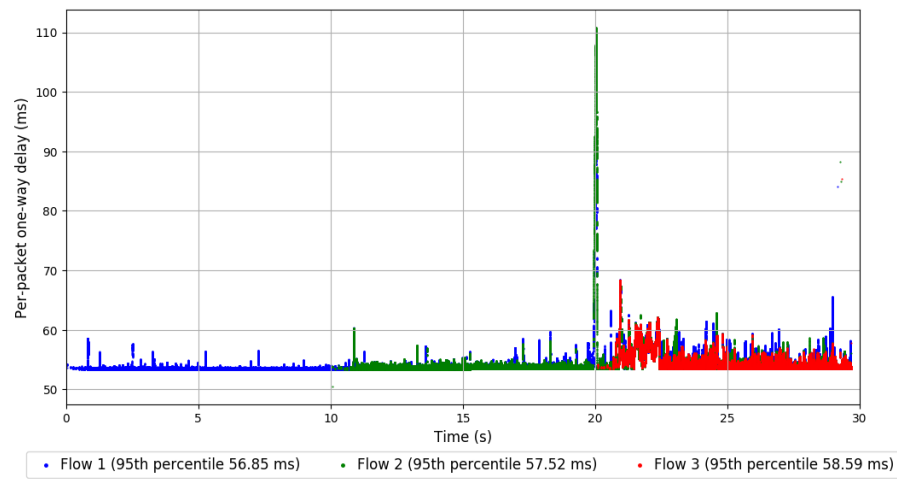
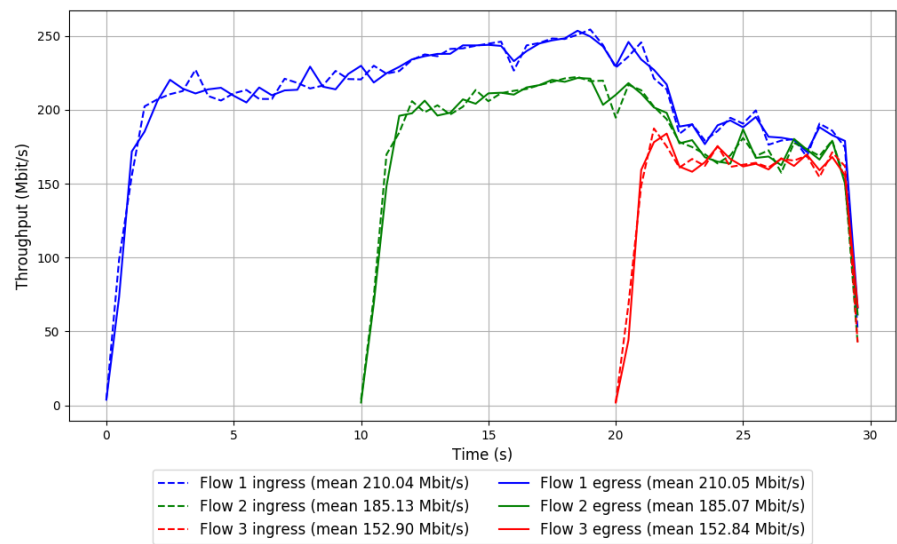
-- Flow 3:

Average throughput: 152.84 Mbit/s

95th percentile per-packet one-way delay: 58.593 ms

Loss rate: 0.02%

Run 3: Report of Indigo-1-32 — Data Link



Run 4: Statistics of Indigo-1-32

Start at: 2018-02-14 09:25:20

End at: 2018-02-14 09:25:50

Below is generated by plot.py at 2018-02-14 15:42:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 377.65 Mbit/s

95th percentile per-packet one-way delay: 56.115 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 202.89 Mbit/s

95th percentile per-packet one-way delay: 55.203 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 188.27 Mbit/s

95th percentile per-packet one-way delay: 57.439 ms

Loss rate: 0.01%

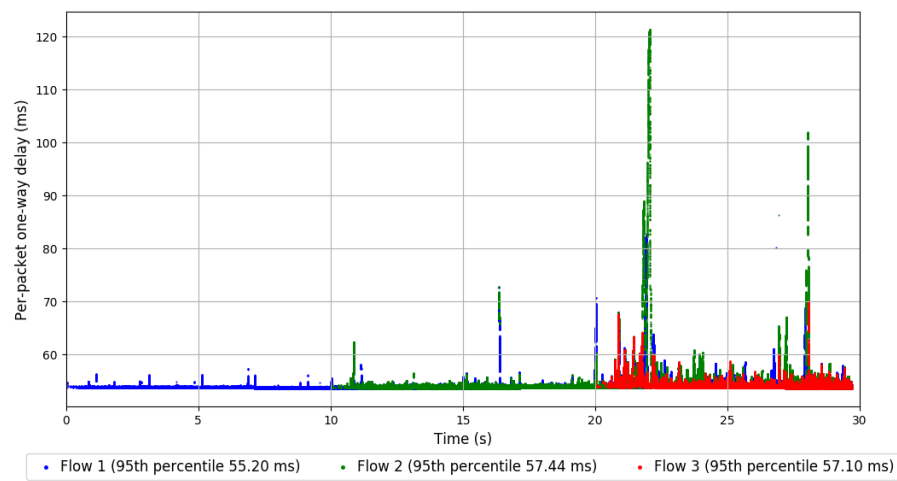
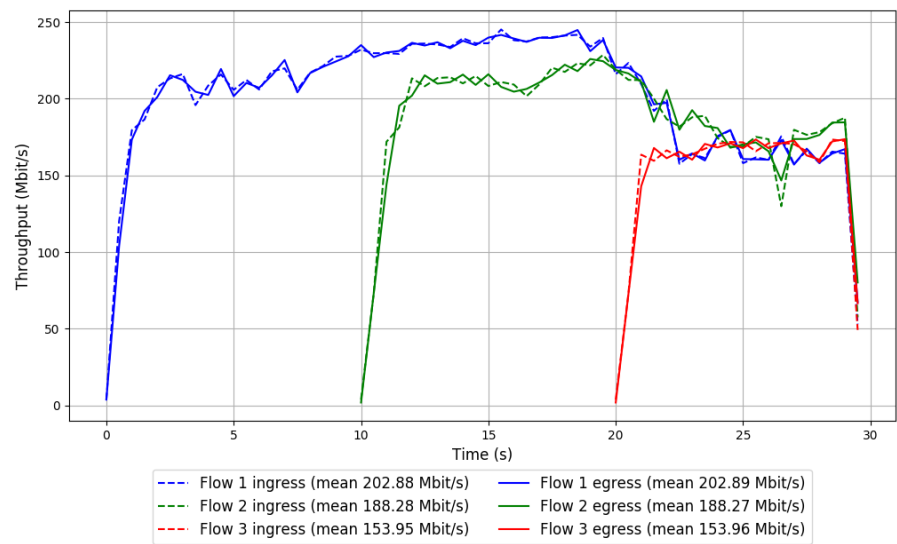
-- Flow 3:

Average throughput: 153.96 Mbit/s

95th percentile per-packet one-way delay: 57.101 ms

Loss rate: 0.02%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-02-14 09:42:54

End at: 2018-02-14 09:43:24

Below is generated by plot.py at 2018-02-14 15:42:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 356.60 Mbit/s

95th percentile per-packet one-way delay: 55.585 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 195.81 Mbit/s

95th percentile per-packet one-way delay: 55.148 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 177.38 Mbit/s

95th percentile per-packet one-way delay: 56.150 ms

Loss rate: 0.01%

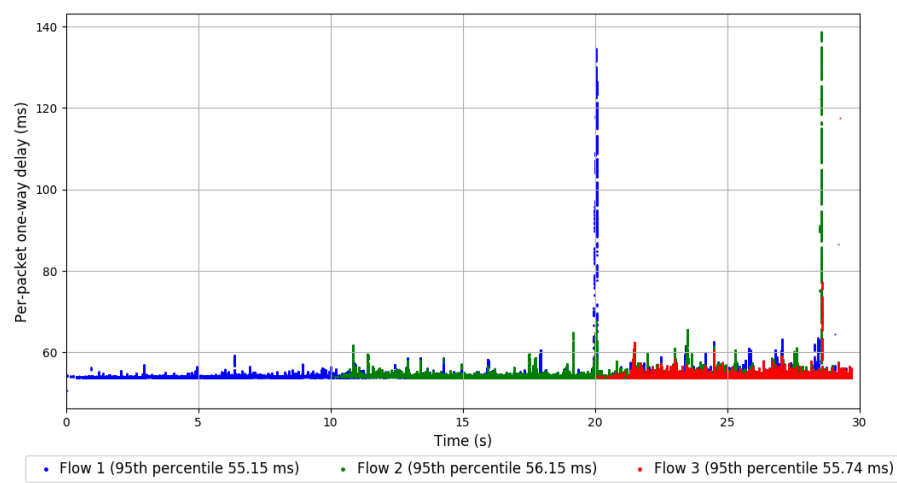
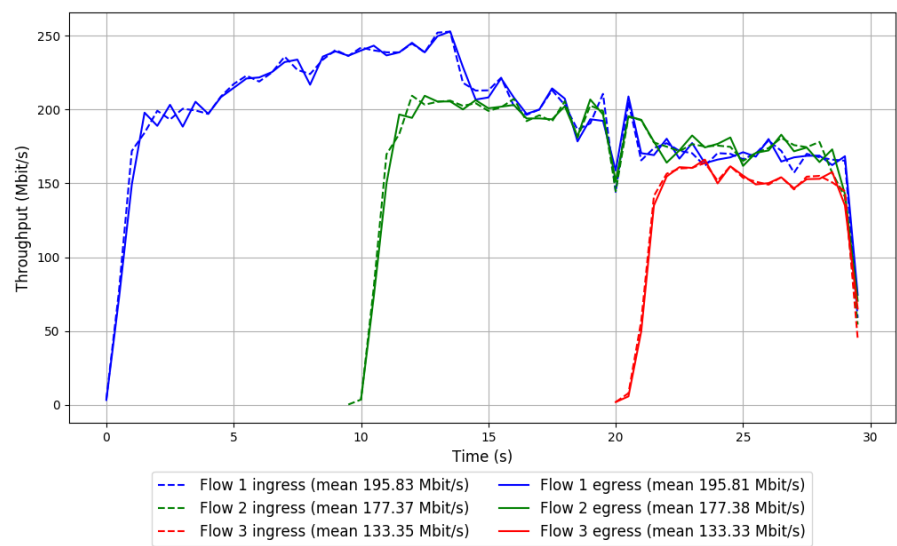
-- Flow 3:

Average throughput: 133.33 Mbit/s

95th percentile per-packet one-way delay: 55.738 ms

Loss rate: 0.03%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-02-14 10:00:28

End at: 2018-02-14 10:00:58

Below is generated by plot.py at 2018-02-14 15:42:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 381.46 Mbit/s

95th percentile per-packet one-way delay: 56.929 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 205.90 Mbit/s

95th percentile per-packet one-way delay: 56.529 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 191.96 Mbit/s

95th percentile per-packet one-way delay: 57.048 ms

Loss rate: 0.01%

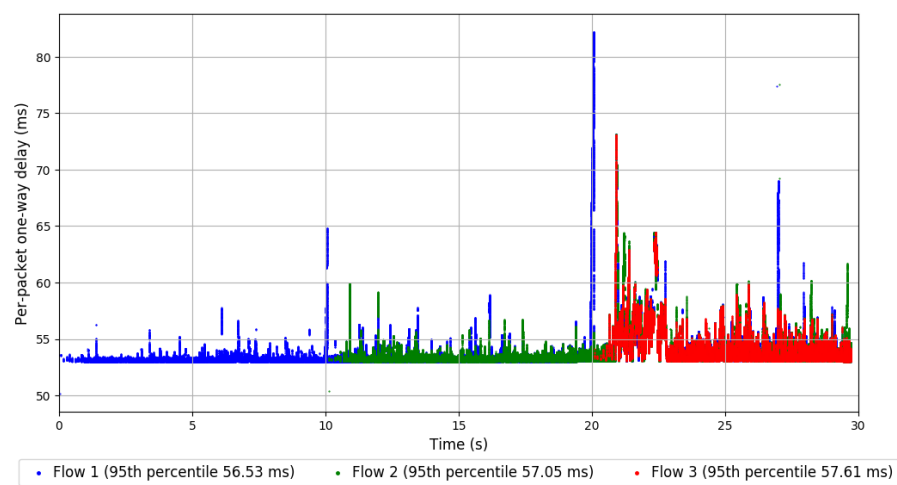
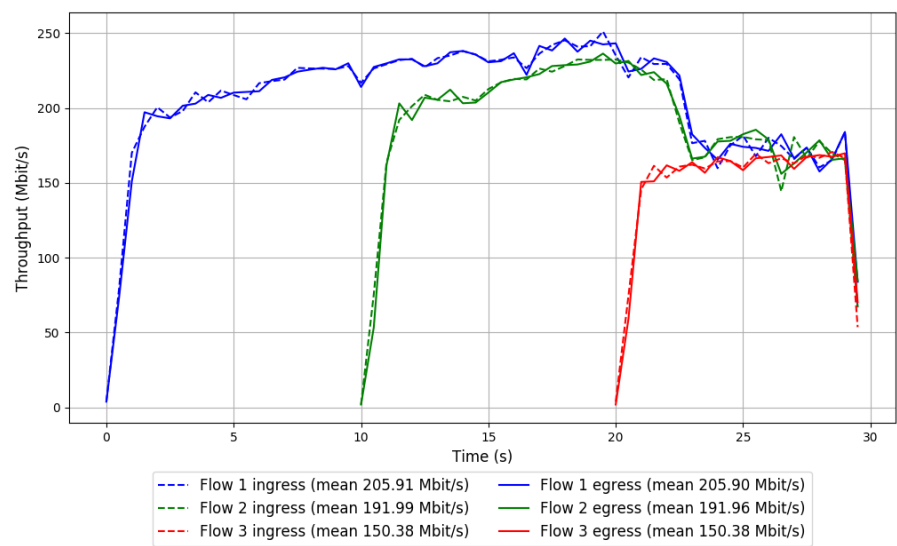
-- Flow 3:

Average throughput: 150.38 Mbit/s

95th percentile per-packet one-way delay: 57.612 ms

Loss rate: 0.02%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-02-14 10:18:05

End at: 2018-02-14 10:18:35

Below is generated by plot.py at 2018-02-14 15:42:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 368.00 Mbit/s

95th percentile per-packet one-way delay: 55.517 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 198.04 Mbit/s

95th percentile per-packet one-way delay: 55.271 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 184.21 Mbit/s

95th percentile per-packet one-way delay: 55.667 ms

Loss rate: 0.00%

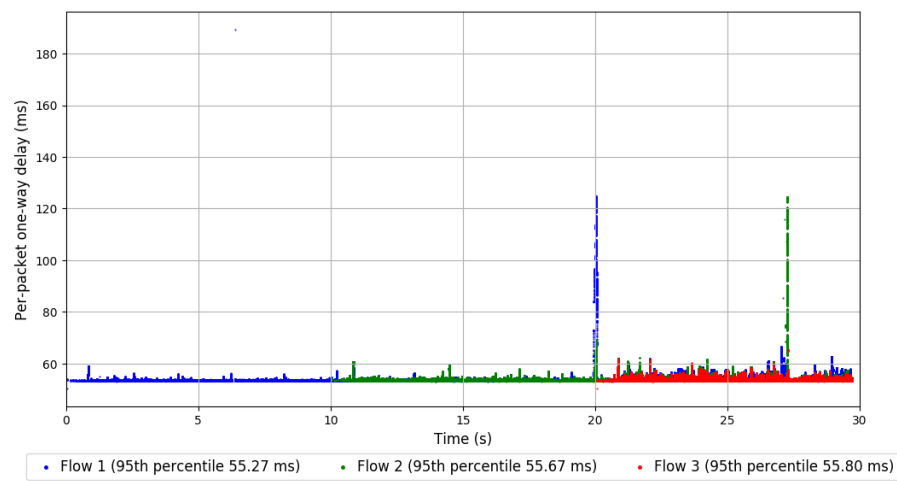
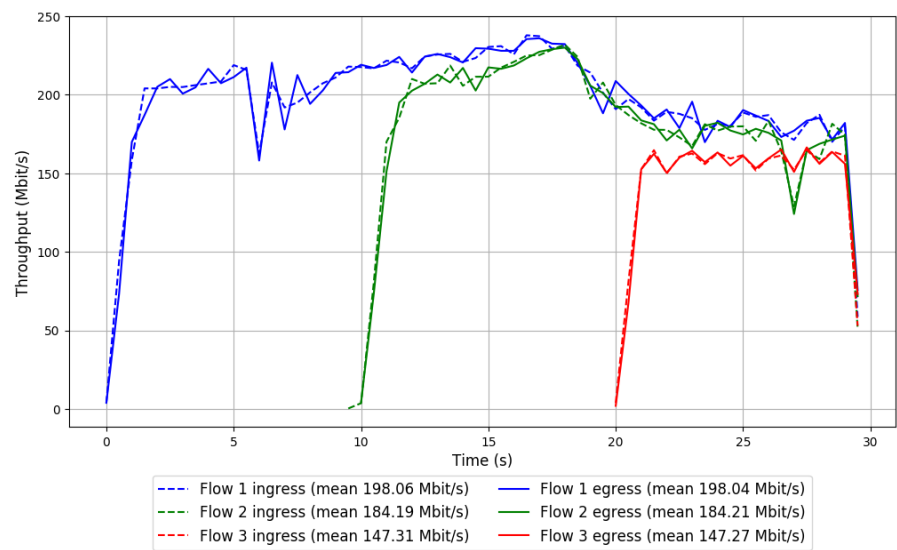
-- Flow 3:

Average throughput: 147.27 Mbit/s

95th percentile per-packet one-way delay: 55.802 ms

Loss rate: 0.00%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-02-14 10:35:47

End at: 2018-02-14 10:36:17

Below is generated by plot.py at 2018-02-14 15:42:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 379.20 Mbit/s

95th percentile per-packet one-way delay: 61.571 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 204.62 Mbit/s

95th percentile per-packet one-way delay: 60.072 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 188.78 Mbit/s

95th percentile per-packet one-way delay: 61.655 ms

Loss rate: 0.01%

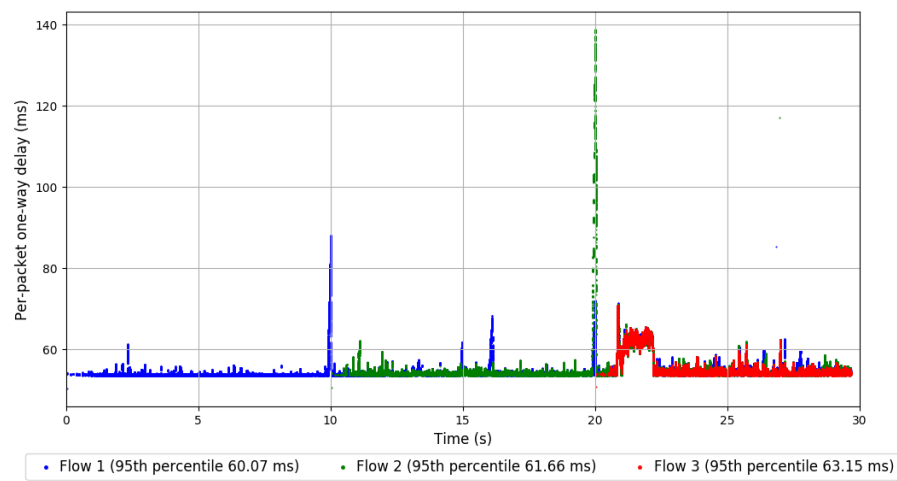
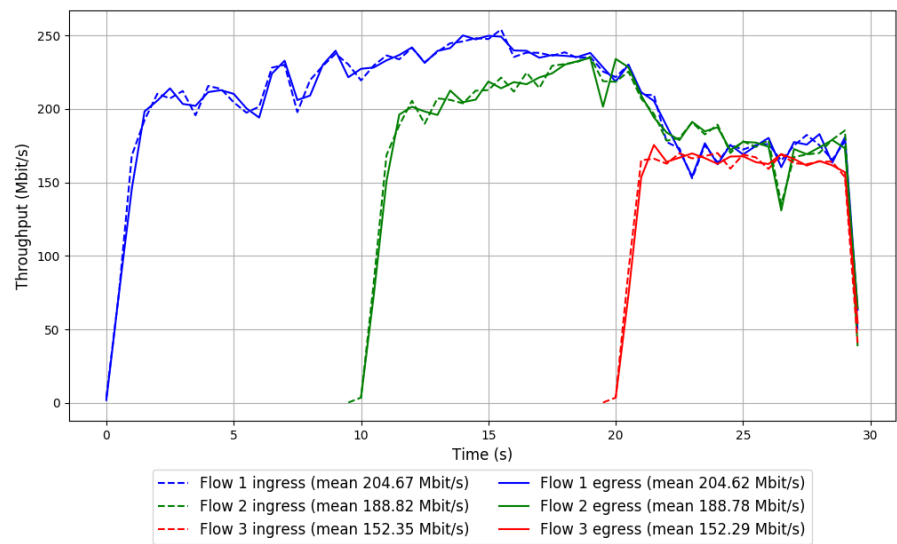
-- Flow 3:

Average throughput: 152.29 Mbit/s

95th percentile per-packet one-way delay: 63.150 ms

Loss rate: 0.04%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-02-14 10:53:17

End at: 2018-02-14 10:53:47

Below is generated by plot.py at 2018-02-14 15:42:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 354.64 Mbit/s

95th percentile per-packet one-way delay: 55.607 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 191.62 Mbit/s

95th percentile per-packet one-way delay: 55.047 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 171.22 Mbit/s

95th percentile per-packet one-way delay: 56.342 ms

Loss rate: 0.01%

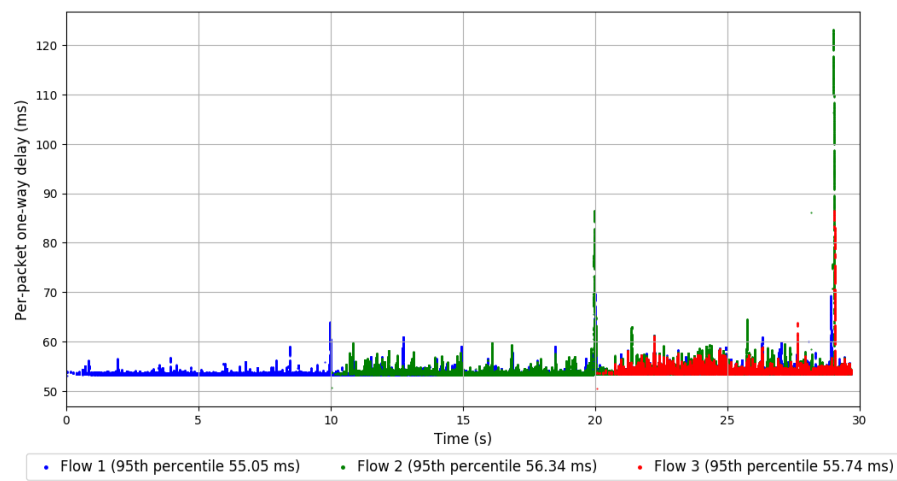
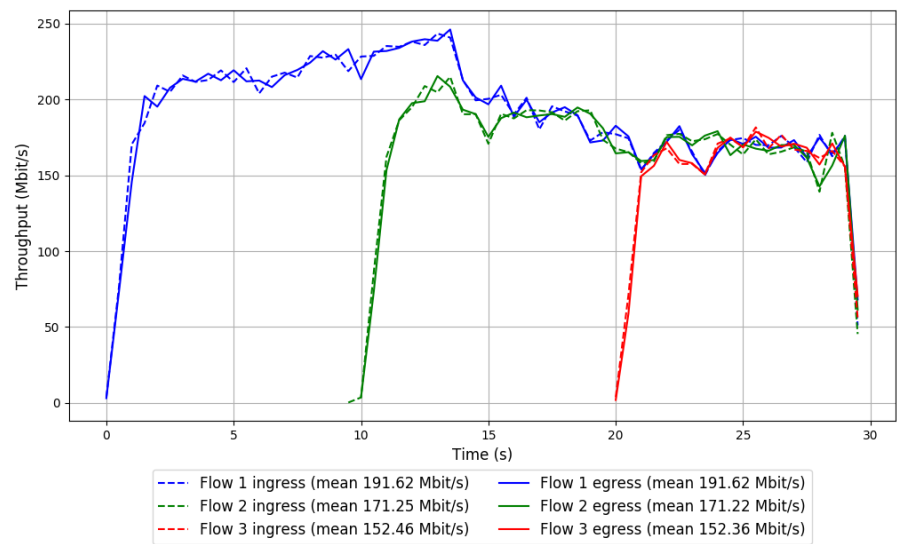
-- Flow 3:

Average throughput: 152.36 Mbit/s

95th percentile per-packet one-way delay: 55.738 ms

Loss rate: 0.06%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-02-14 11:10:51

End at: 2018-02-14 11:11:21

Below is generated by plot.py at 2018-02-14 15:42:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 380.94 Mbit/s

95th percentile per-packet one-way delay: 57.698 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 204.26 Mbit/s

95th percentile per-packet one-way delay: 56.711 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 188.68 Mbit/s

95th percentile per-packet one-way delay: 58.155 ms

Loss rate: 0.00%

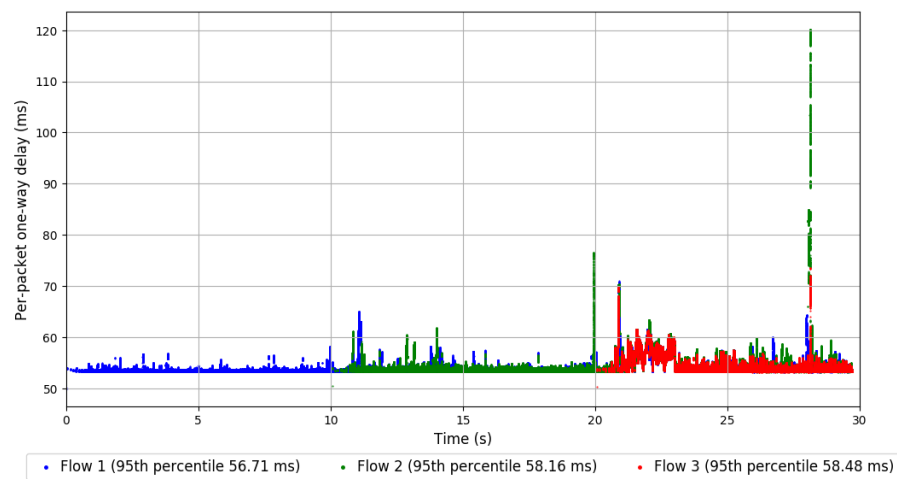
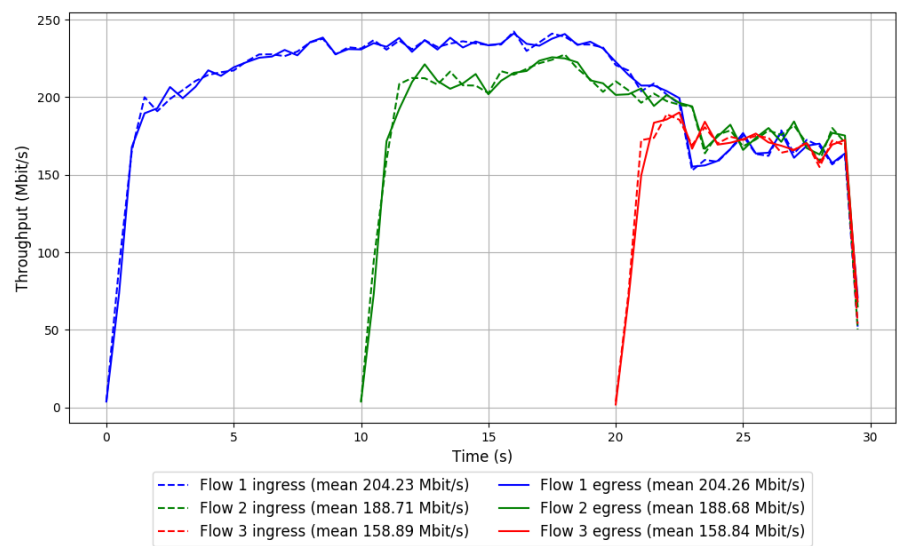
-- Flow 3:

Average throughput: 158.84 Mbit/s

95th percentile per-packet one-way delay: 58.478 ms

Loss rate: 0.00%

Run 10: Report of Indigo-1-32 — Data Link



Run 1: Statistics of Vivace-latency

Start at: 2018-02-14 08:42:52

End at: 2018-02-14 08:43:22

Below is generated by plot.py at 2018-02-14 15:42:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 502.30 Mbit/s

95th percentile per-packet one-way delay: 71.457 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 291.10 Mbit/s

95th percentile per-packet one-way delay: 98.883 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 275.04 Mbit/s

95th percentile per-packet one-way delay: 59.000 ms

Loss rate: 0.01%

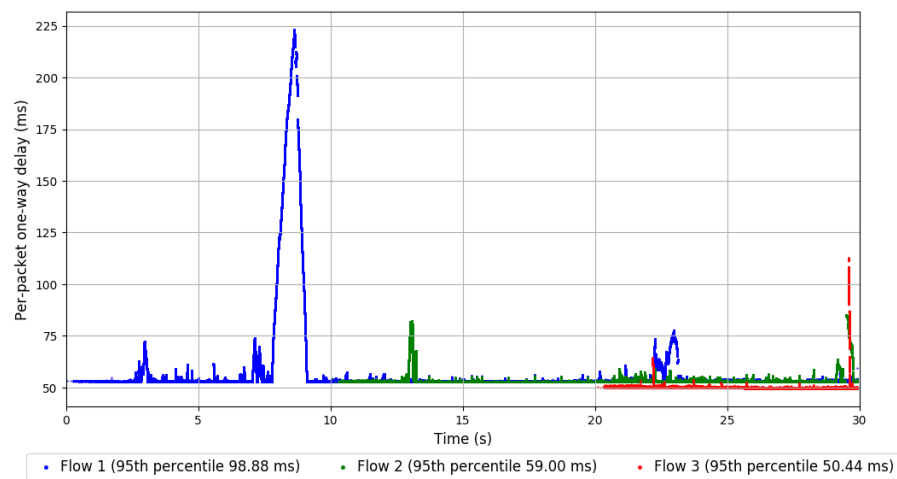
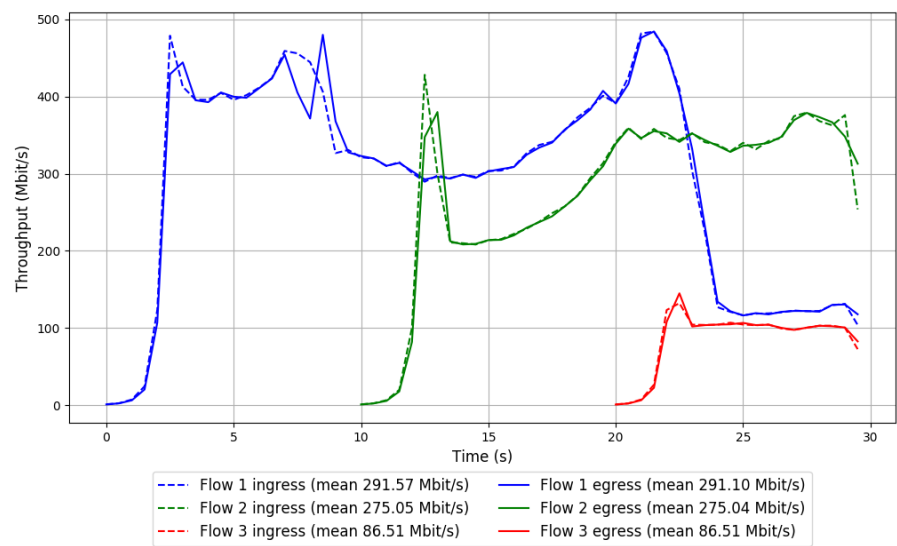
-- Flow 3:

Average throughput: 86.51 Mbit/s

95th percentile per-packet one-way delay: 50.442 ms

Loss rate: 0.00%

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-02-14 09:00:16

End at: 2018-02-14 09:00:46

Below is generated by plot.py at 2018-02-14 15:42:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 431.80 Mbit/s

95th percentile per-packet one-way delay: 106.639 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 273.41 Mbit/s

95th percentile per-packet one-way delay: 135.501 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 222.96 Mbit/s

95th percentile per-packet one-way delay: 58.255 ms

Loss rate: 0.00%

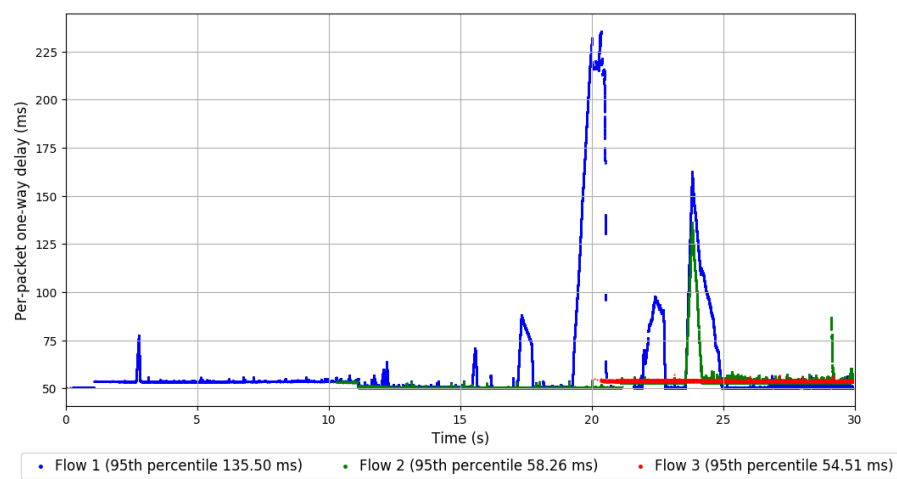
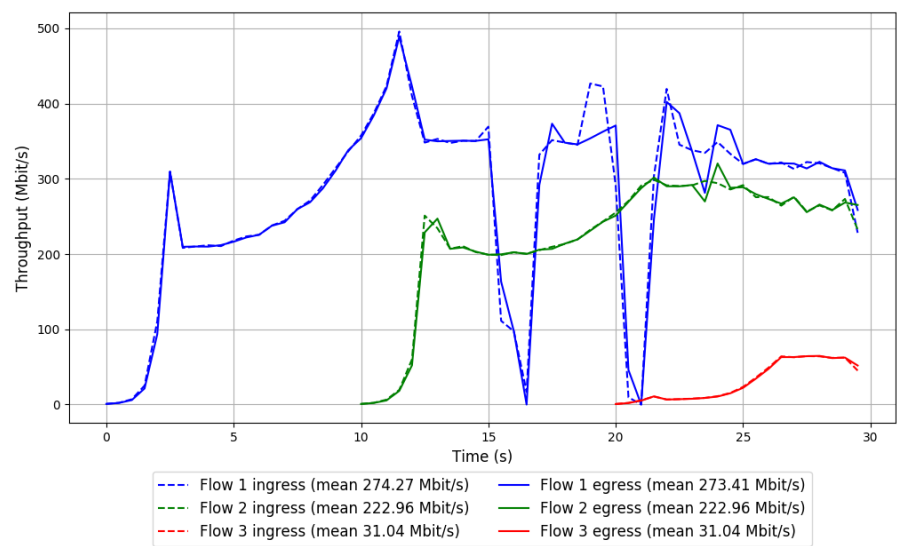
-- Flow 3:

Average throughput: 31.04 Mbit/s

95th percentile per-packet one-way delay: 54.511 ms

Loss rate: 0.00%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-02-14 09:17:46

End at: 2018-02-14 09:18:16

Below is generated by plot.py at 2018-02-14 15:42:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 516.57 Mbit/s

95th percentile per-packet one-way delay: 69.686 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 295.40 Mbit/s

95th percentile per-packet one-way delay: 128.412 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 253.70 Mbit/s

95th percentile per-packet one-way delay: 54.566 ms

Loss rate: 0.00%

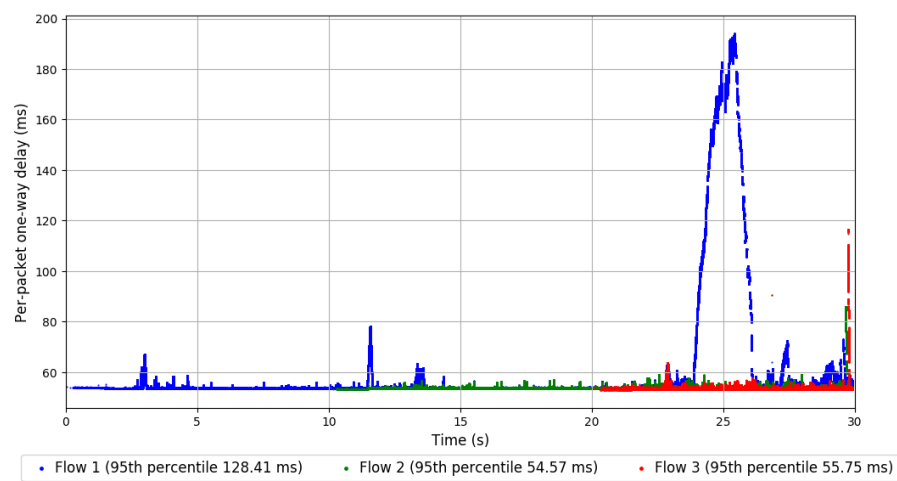
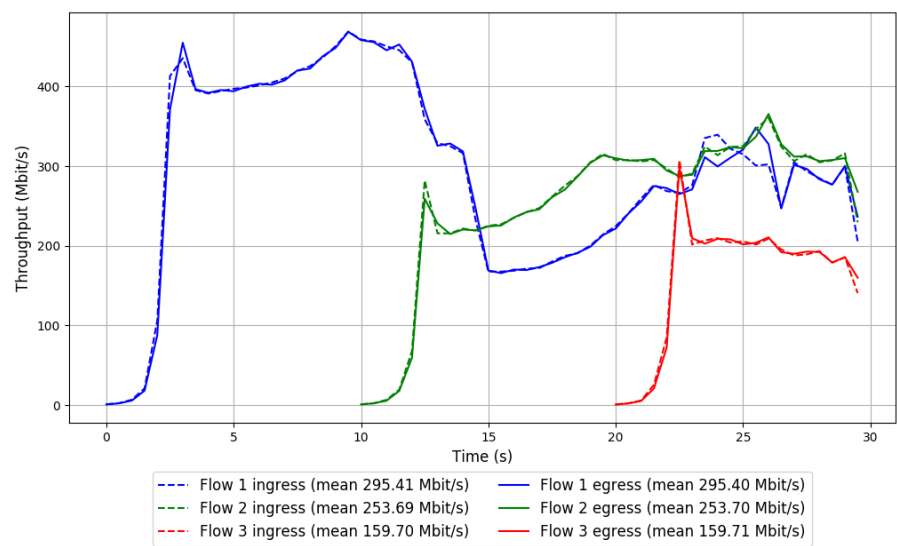
-- Flow 3:

Average throughput: 159.71 Mbit/s

95th percentile per-packet one-way delay: 55.750 ms

Loss rate: 0.00%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-02-14 09:35:30

End at: 2018-02-14 09:36:00

Below is generated by plot.py at 2018-02-14 15:42:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 463.35 Mbit/s

95th percentile per-packet one-way delay: 61.078 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 267.99 Mbit/s

95th percentile per-packet one-way delay: 78.673 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 258.11 Mbit/s

95th percentile per-packet one-way delay: 52.604 ms

Loss rate: 0.00%

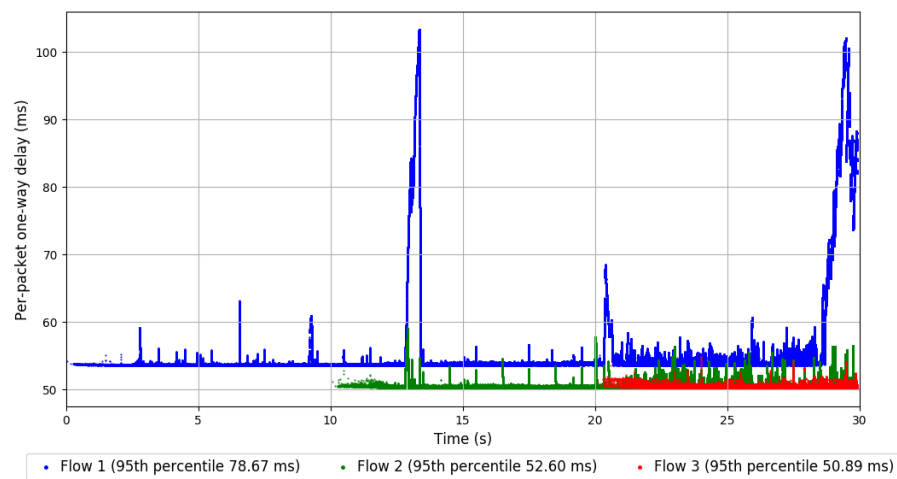
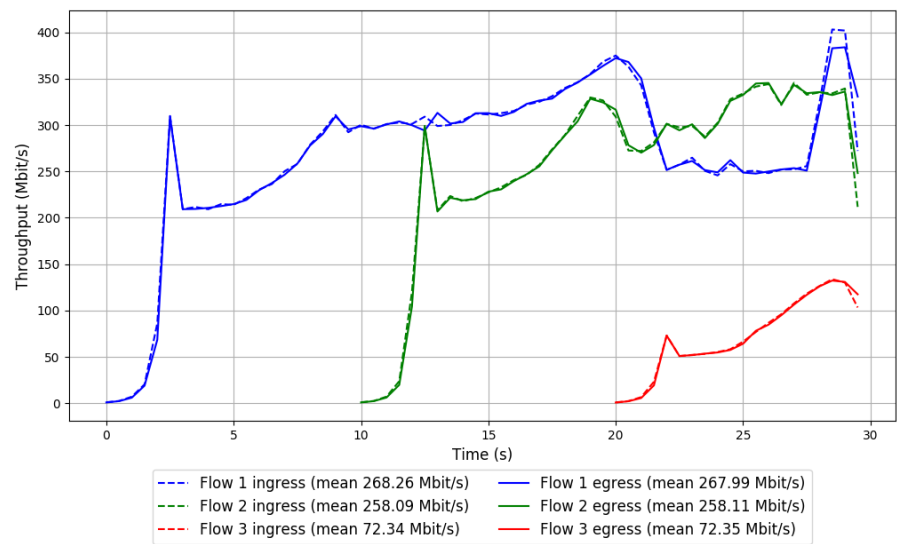
-- Flow 3:

Average throughput: 72.35 Mbit/s

95th percentile per-packet one-way delay: 50.891 ms

Loss rate: 0.00%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-02-14 09:52:43

End at: 2018-02-14 09:53:13

Below is generated by plot.py at 2018-02-14 15:42:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 506.39 Mbit/s

95th percentile per-packet one-way delay: 62.424 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 346.31 Mbit/s

95th percentile per-packet one-way delay: 58.956 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 143.95 Mbit/s

95th percentile per-packet one-way delay: 79.236 ms

Loss rate: 0.00%

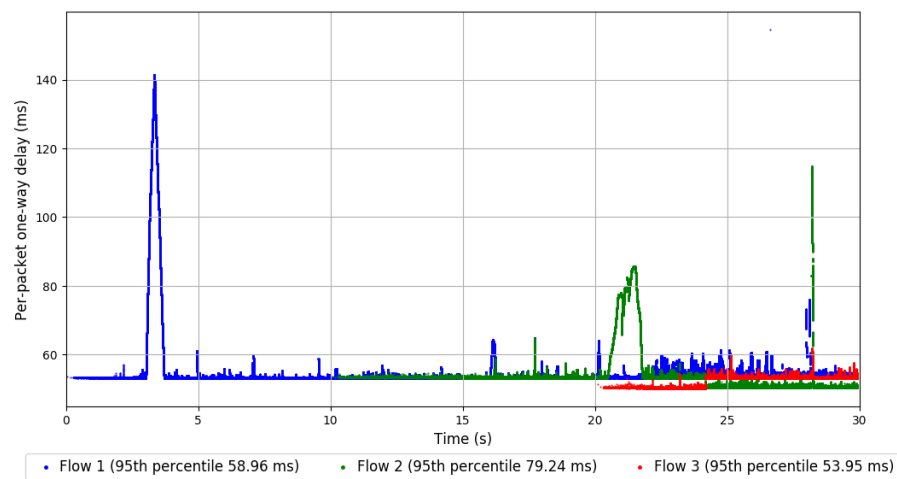
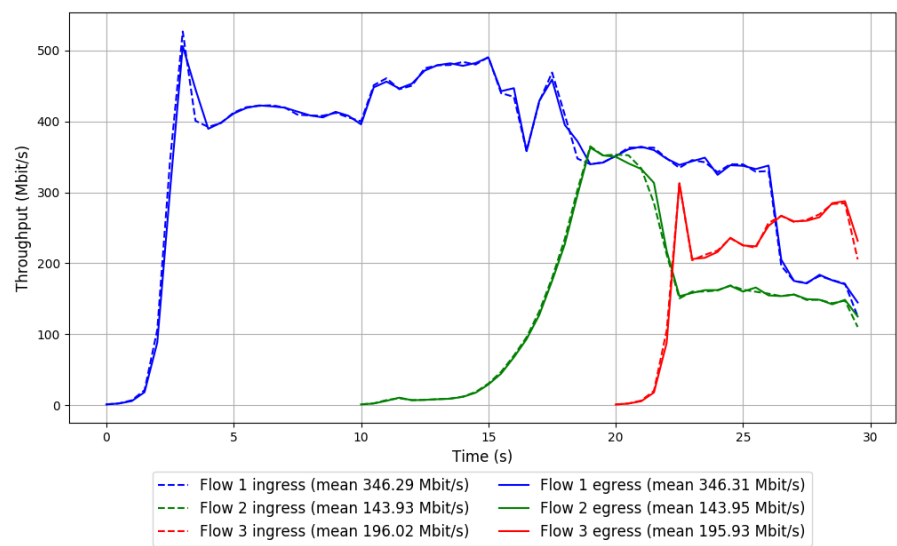
-- Flow 3:

Average throughput: 195.93 Mbit/s

95th percentile per-packet one-way delay: 53.947 ms

Loss rate: 0.03%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-02-14 10:10:34

End at: 2018-02-14 10:11:04

Below is generated by plot.py at 2018-02-14 15:42:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 492.29 Mbit/s

95th percentile per-packet one-way delay: 107.368 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 238.43 Mbit/s

95th percentile per-packet one-way delay: 51.350 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 299.61 Mbit/s

95th percentile per-packet one-way delay: 197.573 ms

Loss rate: 1.33%

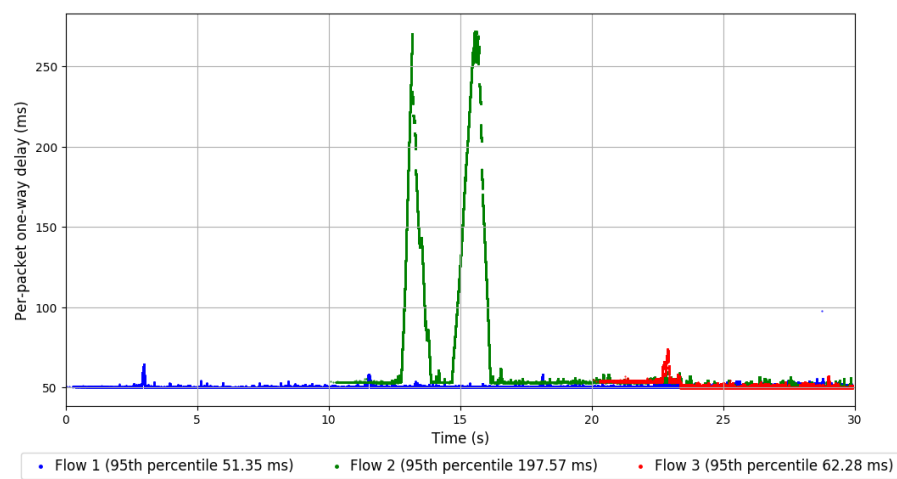
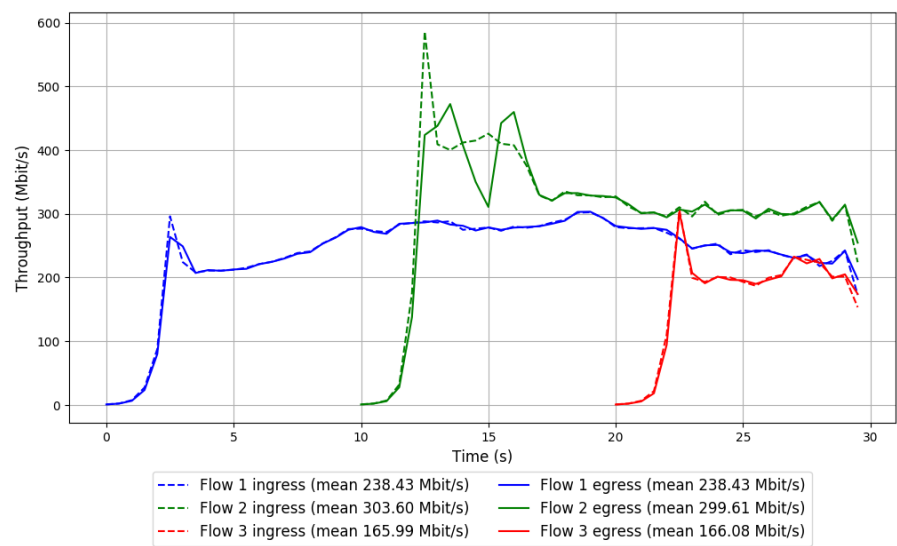
-- Flow 3:

Average throughput: 166.08 Mbit/s

95th percentile per-packet one-way delay: 62.283 ms

Loss rate: 0.00%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-02-14 10:28:03

End at: 2018-02-14 10:28:33

Below is generated by plot.py at 2018-02-14 15:42:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 599.80 Mbit/s

95th percentile per-packet one-way delay: 72.693 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 321.88 Mbit/s

95th percentile per-packet one-way delay: 58.429 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 327.12 Mbit/s

95th percentile per-packet one-way delay: 108.913 ms

Loss rate: 0.00%

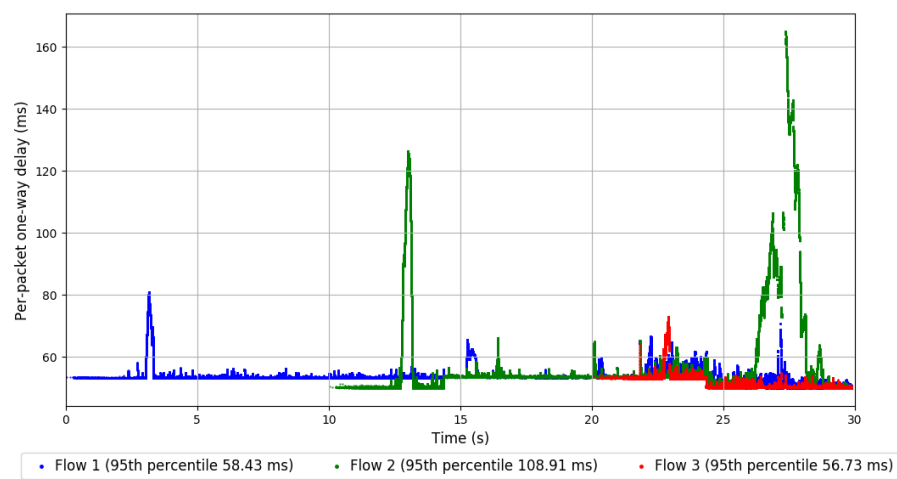
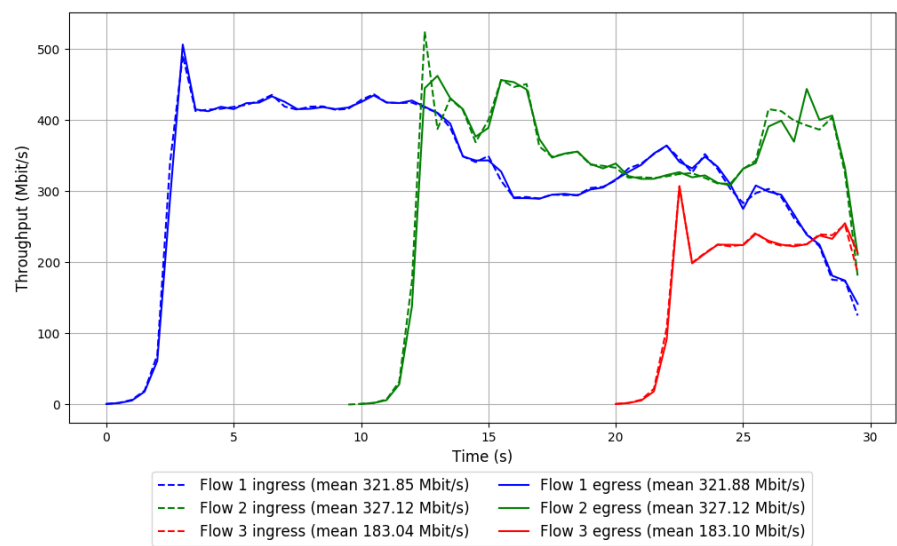
-- Flow 3:

Average throughput: 183.10 Mbit/s

95th percentile per-packet one-way delay: 56.729 ms

Loss rate: 0.00%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-02-14 10:45:43

End at: 2018-02-14 10:46:13

Below is generated by plot.py at 2018-02-14 15:42:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 528.63 Mbit/s

95th percentile per-packet one-way delay: 63.652 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 269.15 Mbit/s

95th percentile per-packet one-way delay: 57.149 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 313.73 Mbit/s

95th percentile per-packet one-way delay: 93.292 ms

Loss rate: 0.00%

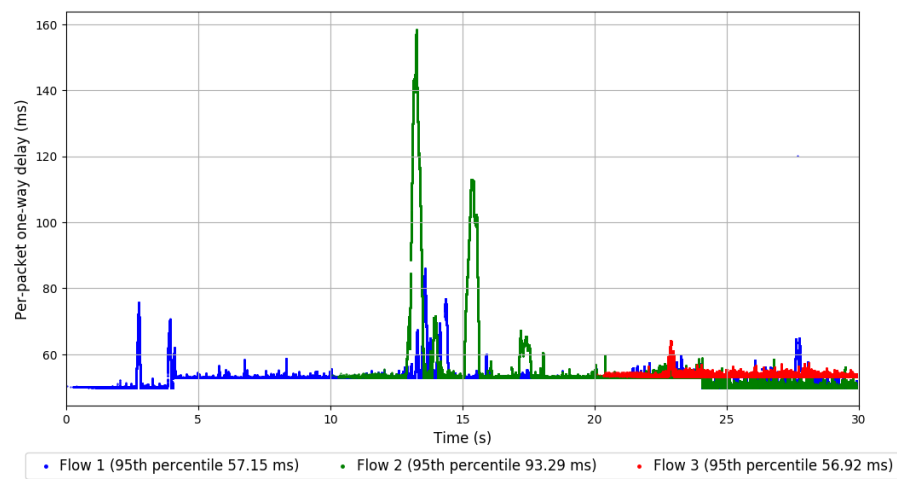
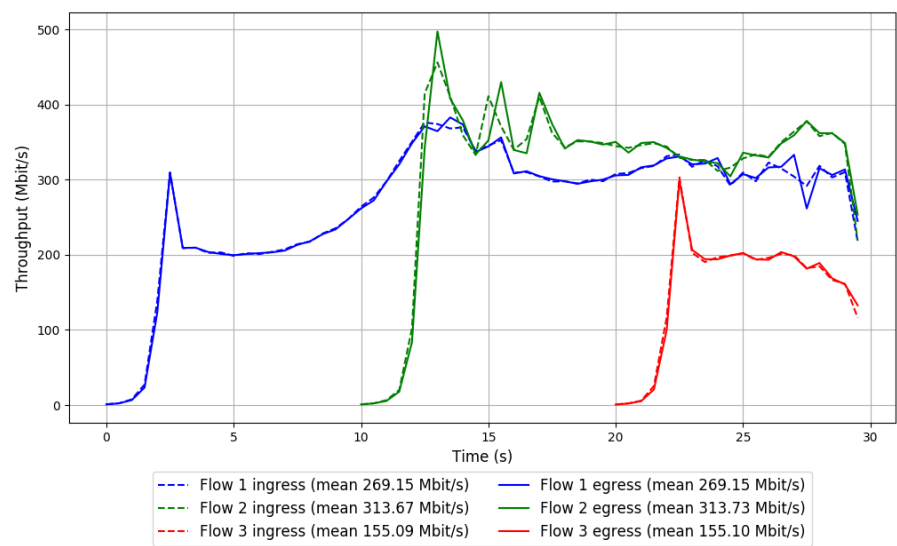
-- Flow 3:

Average throughput: 155.10 Mbit/s

95th percentile per-packet one-way delay: 56.916 ms

Loss rate: 0.02%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-02-14 11:03:17

End at: 2018-02-14 11:03:47

Below is generated by plot.py at 2018-02-14 15:42:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 486.53 Mbit/s

95th percentile per-packet one-way delay: 55.723 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 257.23 Mbit/s

95th percentile per-packet one-way delay: 56.247 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 266.72 Mbit/s

95th percentile per-packet one-way delay: 55.105 ms

Loss rate: 0.00%

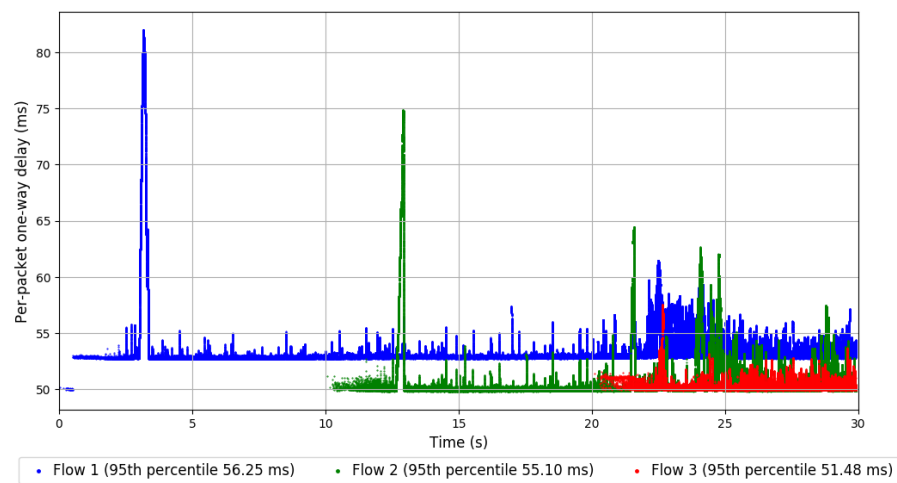
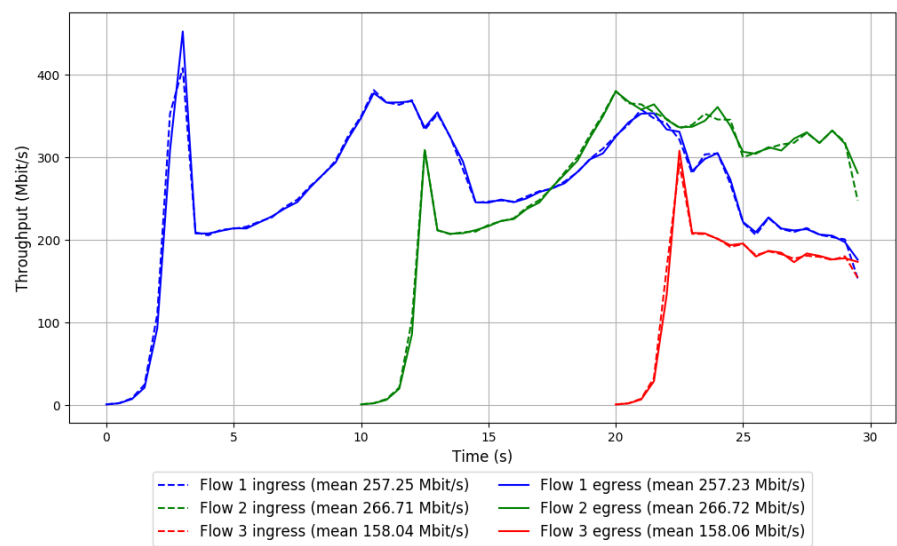
-- Flow 3:

Average throughput: 158.06 Mbit/s

95th percentile per-packet one-way delay: 51.476 ms

Loss rate: 0.00%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-02-14 11:20:44

End at: 2018-02-14 11:21:14

Below is generated by plot.py at 2018-02-14 15:43:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 507.43 Mbit/s

95th percentile per-packet one-way delay: 68.622 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 282.42 Mbit/s

95th percentile per-packet one-way delay: 57.214 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 251.97 Mbit/s

95th percentile per-packet one-way delay: 94.052 ms

Loss rate: 0.00%

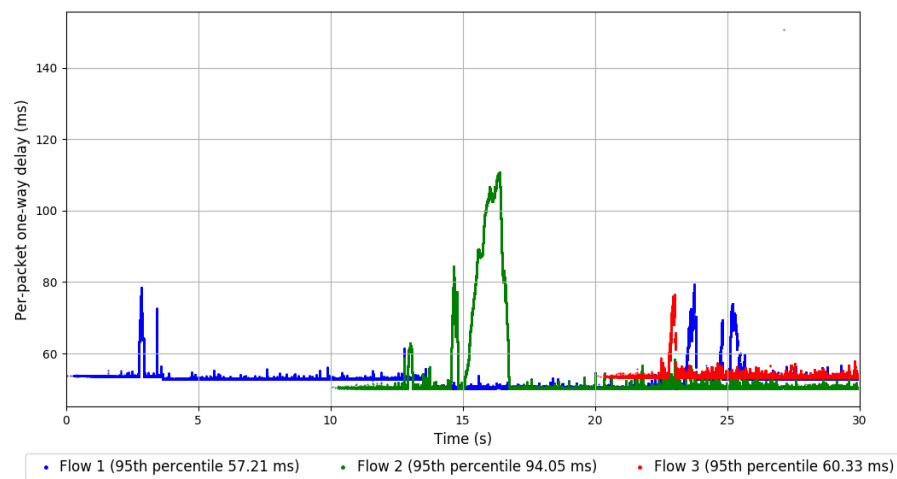
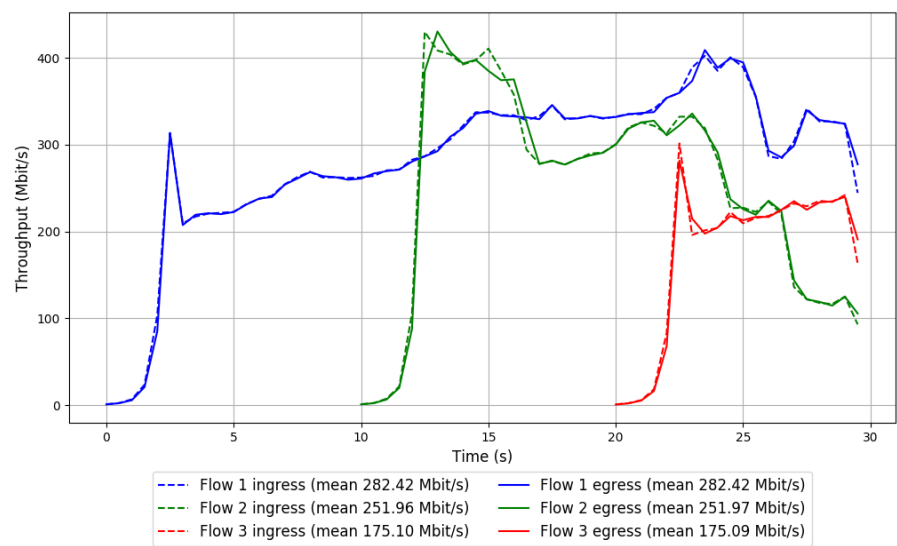
-- Flow 3:

Average throughput: 175.09 Mbit/s

95th percentile per-packet one-way delay: 60.331 ms

Loss rate: 0.00%

Run 10: Report of Vivace-latency — Data Link

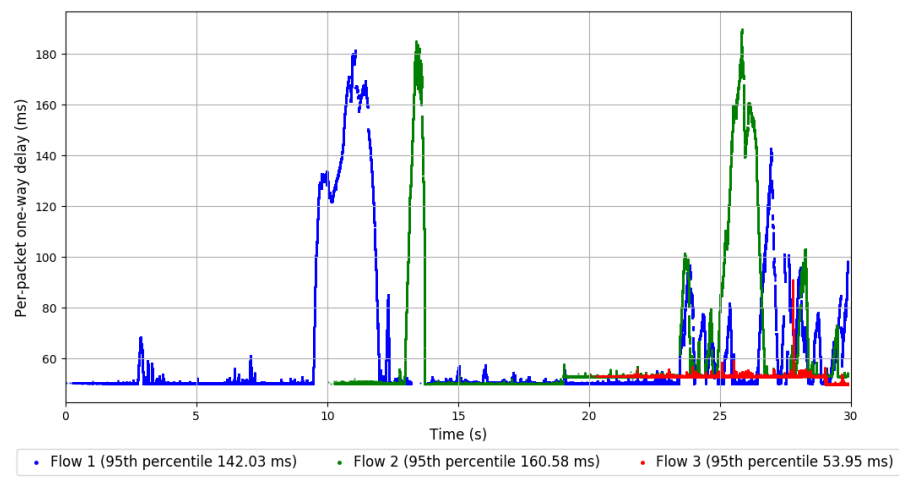
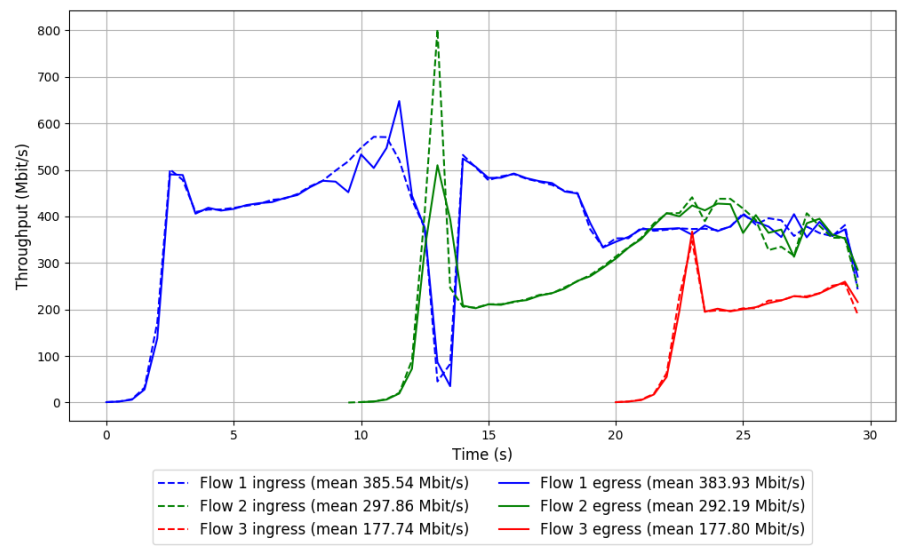


```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-14 08:27:28
End at: 2018-02-14 08:27:58

# Below is generated by plot.py at 2018-02-14 15:46:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 636.81 Mbit/s
95th percentile per-packet one-way delay: 151.530 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 383.93 Mbit/s
95th percentile per-packet one-way delay: 142.035 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 292.19 Mbit/s
95th percentile per-packet one-way delay: 160.584 ms
Loss rate: 1.89%
-- Flow 3:
Average throughput: 177.80 Mbit/s
95th percentile per-packet one-way delay: 53.954 ms
Loss rate: 0.00%
```

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-02-14 08:45:01

End at: 2018-02-14 08:45:31

Below is generated by plot.py at 2018-02-14 15:46:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 540.84 Mbit/s

95th percentile per-packet one-way delay: 66.779 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 294.04 Mbit/s

95th percentile per-packet one-way delay: 59.293 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 277.76 Mbit/s

95th percentile per-packet one-way delay: 62.784 ms

Loss rate: 0.02%

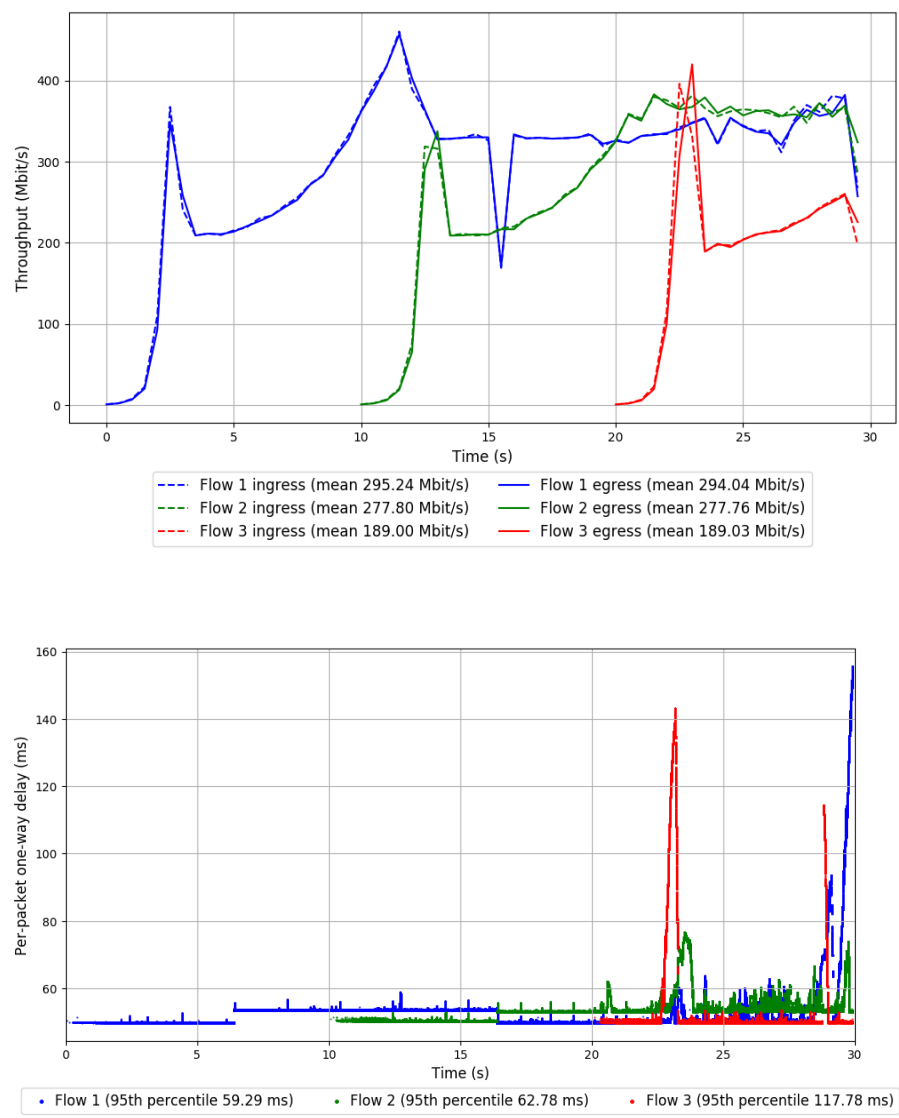
-- Flow 3:

Average throughput: 189.03 Mbit/s

95th percentile per-packet one-way delay: 117.775 ms

Loss rate: 0.00%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-02-14 09:02:21

End at: 2018-02-14 09:02:51

Below is generated by plot.py at 2018-02-14 15:51:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 586.01 Mbit/s

95th percentile per-packet one-way delay: 184.490 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 357.50 Mbit/s

95th percentile per-packet one-way delay: 127.678 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 250.20 Mbit/s

95th percentile per-packet one-way delay: 235.790 ms

Loss rate: 2.19%

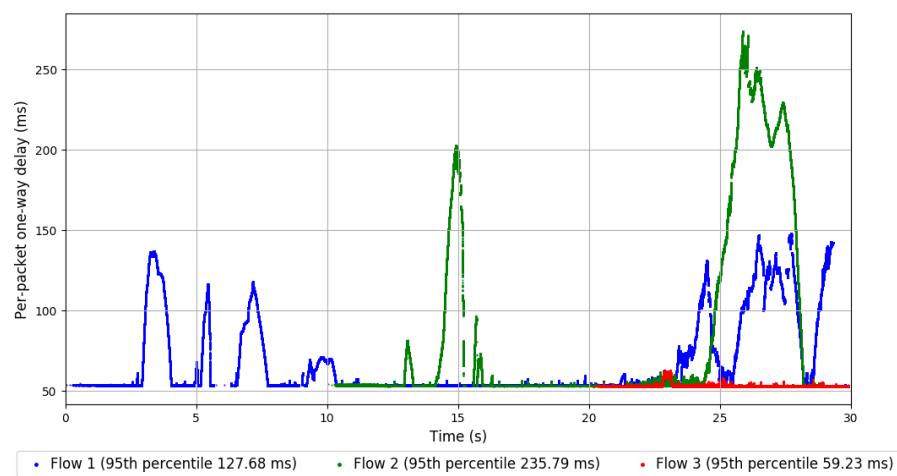
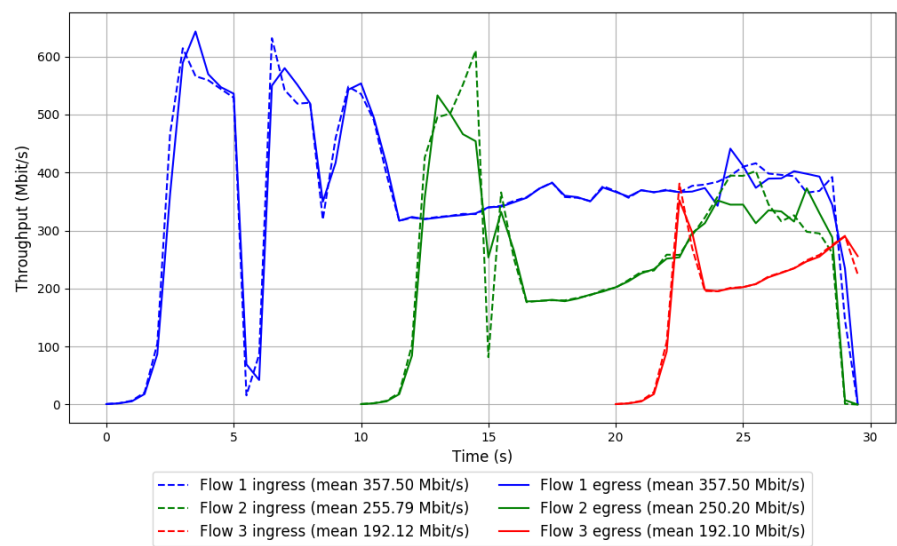
-- Flow 3:

Average throughput: 192.10 Mbit/s

95th percentile per-packet one-way delay: 59.227 ms

Loss rate: 0.03%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-02-14 09:19:53

End at: 2018-02-14 09:20:23

Below is generated by plot.py at 2018-02-14 15:51:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 584.76 Mbit/s

95th percentile per-packet one-way delay: 245.152 ms

Loss rate: 2.29%

-- Flow 1:

Average throughput: 314.55 Mbit/s

95th percentile per-packet one-way delay: 252.786 ms

Loss rate: 2.66%

-- Flow 2:

Average throughput: 264.01 Mbit/s

95th percentile per-packet one-way delay: 68.981 ms

Loss rate: 0.12%

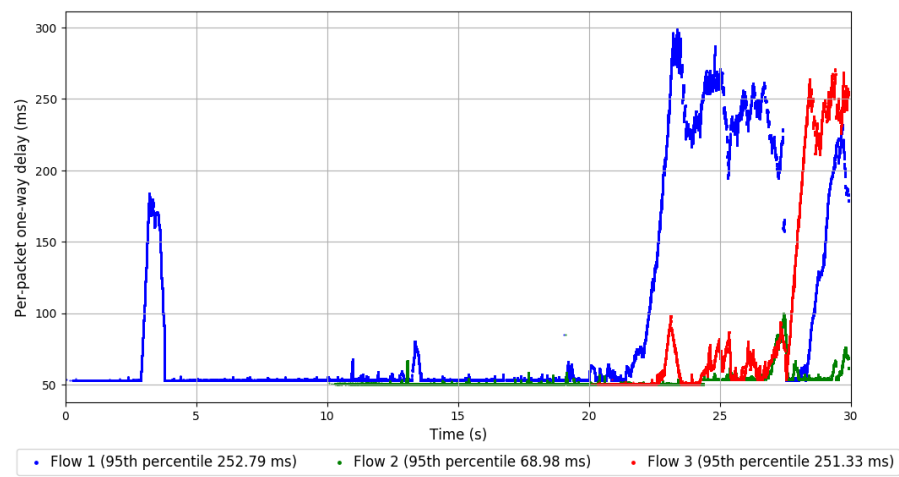
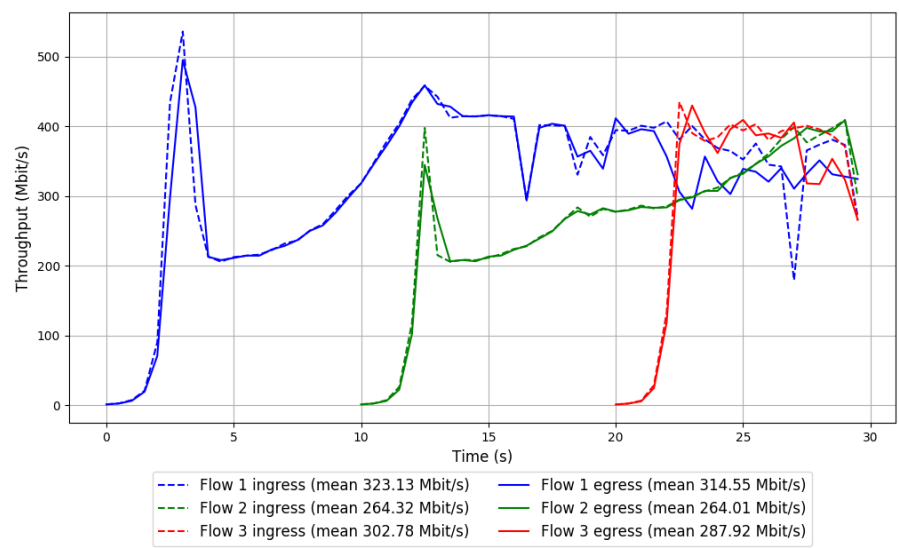
-- Flow 3:

Average throughput: 287.92 Mbit/s

95th percentile per-packet one-way delay: 251.329 ms

Loss rate: 4.90%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-02-14 09:37:30

End at: 2018-02-14 09:38:00

Below is generated by plot.py at 2018-02-14 15:54:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 651.63 Mbit/s

95th percentile per-packet one-way delay: 114.320 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 364.67 Mbit/s

95th percentile per-packet one-way delay: 106.409 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 297.81 Mbit/s

95th percentile per-packet one-way delay: 75.980 ms

Loss rate: 0.51%

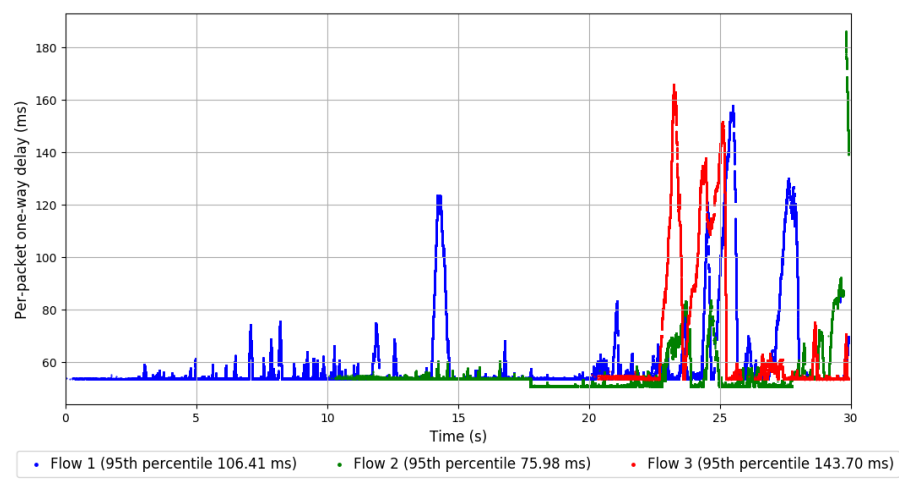
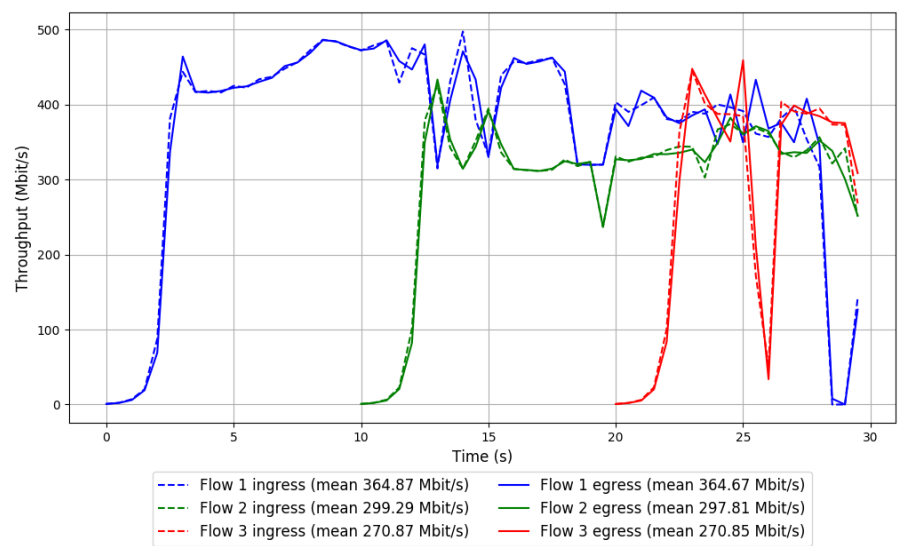
-- Flow 3:

Average throughput: 270.85 Mbit/s

95th percentile per-packet one-way delay: 143.696 ms

Loss rate: 0.05%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-02-14 09:54:54

End at: 2018-02-14 09:55:24

Below is generated by plot.py at 2018-02-14 15:54:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 636.04 Mbit/s

95th percentile per-packet one-way delay: 160.879 ms

Loss rate: 1.15%

-- Flow 1:

Average throughput: 391.50 Mbit/s

95th percentile per-packet one-way delay: 153.719 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 277.00 Mbit/s

95th percentile per-packet one-way delay: 236.621 ms

Loss rate: 2.51%

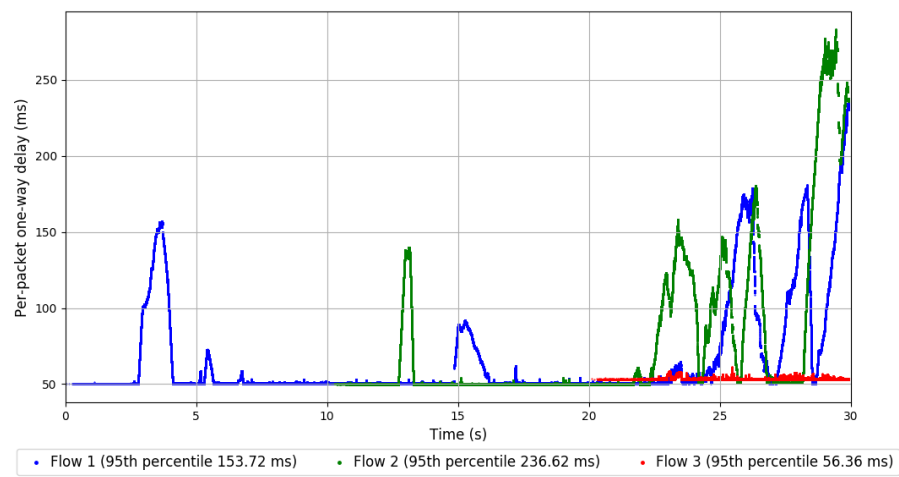
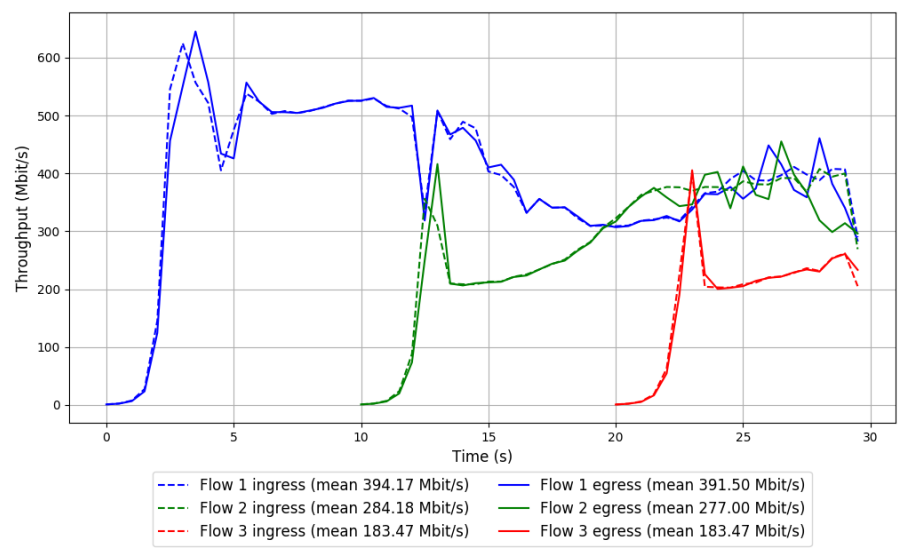
-- Flow 3:

Average throughput: 183.47 Mbit/s

95th percentile per-packet one-way delay: 56.363 ms

Loss rate: 0.00%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-02-14 10:12:44

End at: 2018-02-14 10:13:14

Below is generated by plot.py at 2018-02-14 15:54:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 592.02 Mbit/s

95th percentile per-packet one-way delay: 83.607 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 344.95 Mbit/s

95th percentile per-packet one-way delay: 86.140 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 281.25 Mbit/s

95th percentile per-packet one-way delay: 79.988 ms

Loss rate: 0.03%

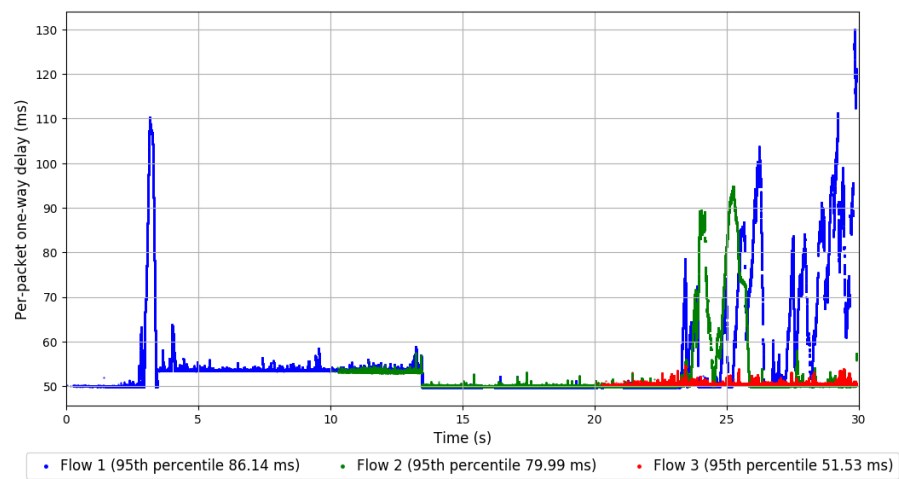
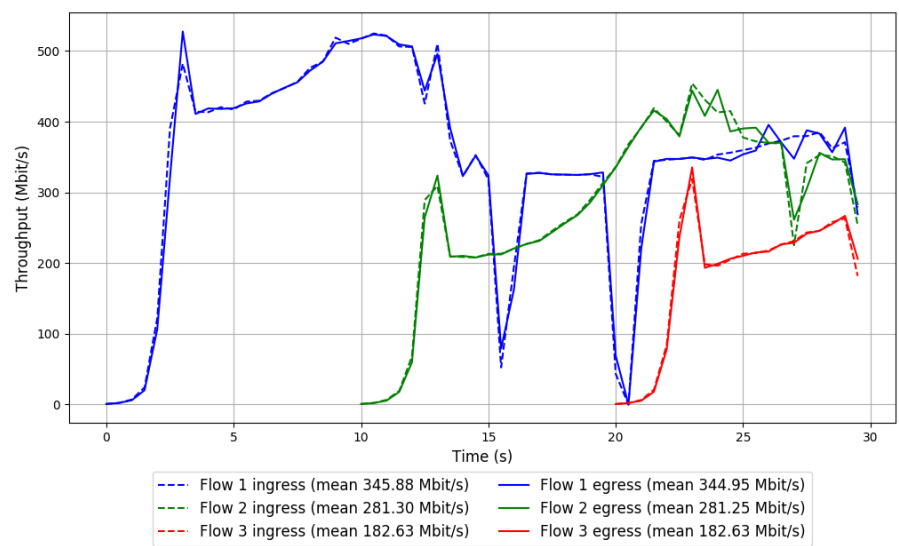
-- Flow 3:

Average throughput: 182.63 Mbit/s

95th percentile per-packet one-way delay: 51.531 ms

Loss rate: 0.00%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-02-14 10:30:19

End at: 2018-02-14 10:30:49

Below is generated by plot.py at 2018-02-14 15:54:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 599.99 Mbit/s

95th percentile per-packet one-way delay: 116.161 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 352.50 Mbit/s

95th percentile per-packet one-way delay: 110.902 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 276.83 Mbit/s

95th percentile per-packet one-way delay: 146.585 ms

Loss rate: 1.17%

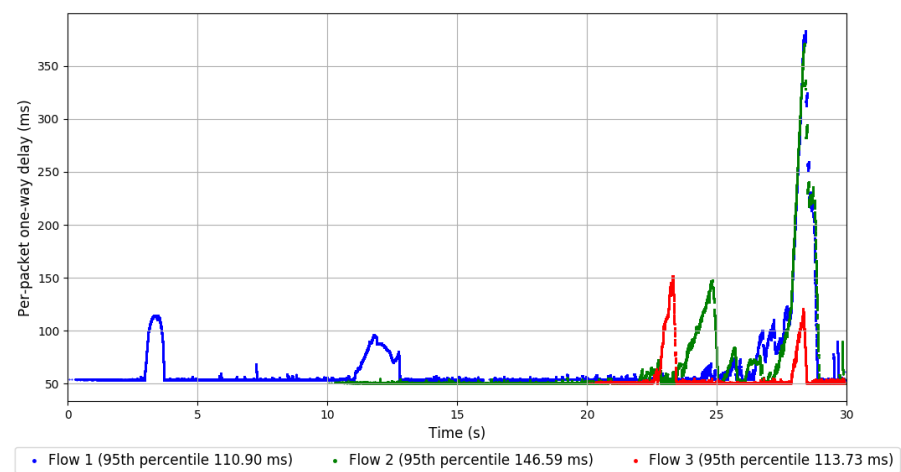
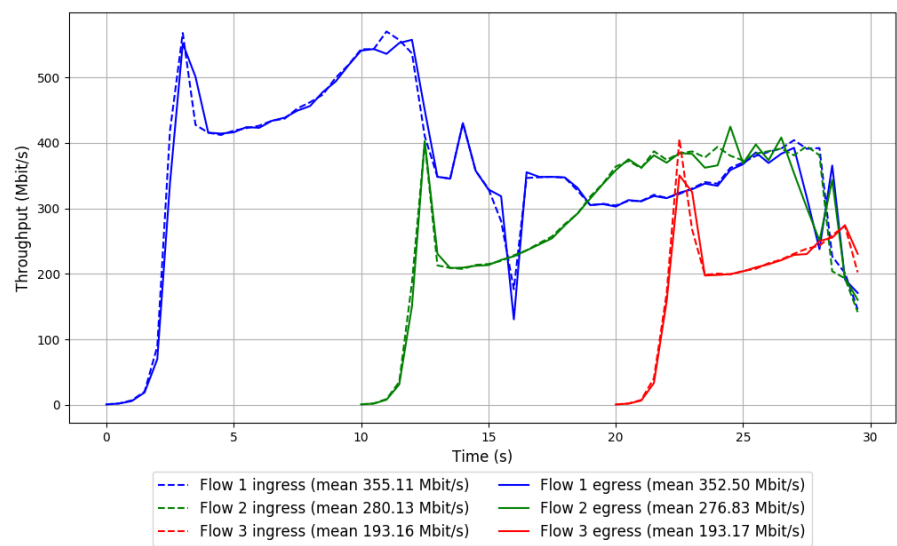
-- Flow 3:

Average throughput: 193.17 Mbit/s

95th percentile per-packet one-way delay: 113.727 ms

Loss rate: 0.00%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-02-14 10:47:51

End at: 2018-02-14 10:48:21

Below is generated by plot.py at 2018-02-14 15:56:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 561.26 Mbit/s

95th percentile per-packet one-way delay: 74.325 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 349.67 Mbit/s

95th percentile per-packet one-way delay: 67.945 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 226.69 Mbit/s

95th percentile per-packet one-way delay: 100.713 ms

Loss rate: 0.00%

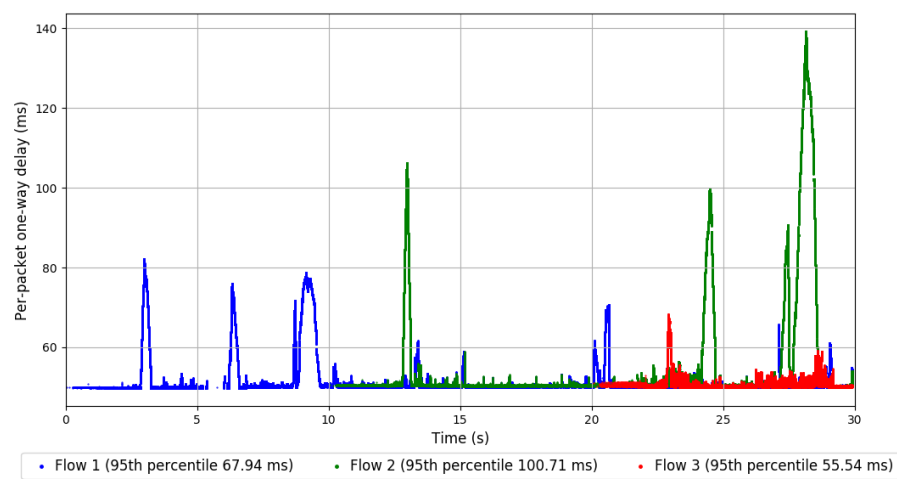
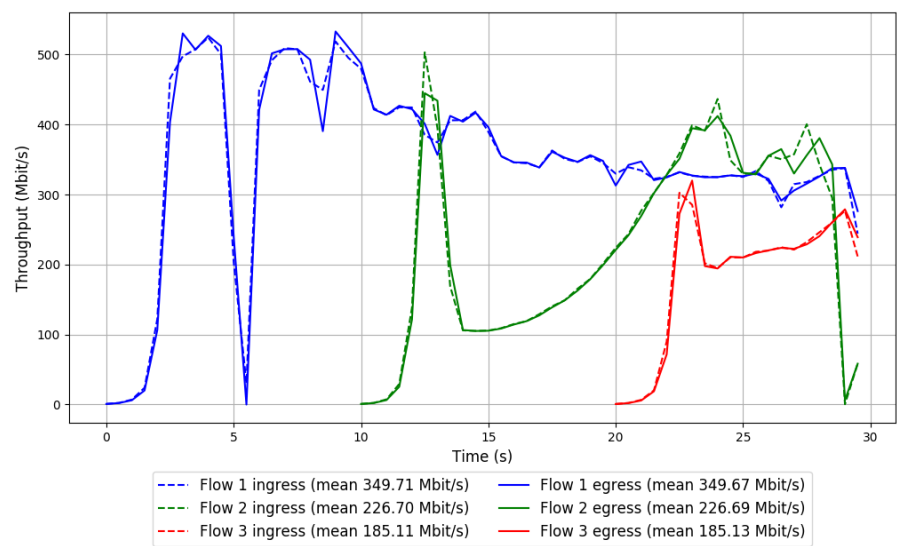
-- Flow 3:

Average throughput: 185.13 Mbit/s

95th percentile per-packet one-way delay: 55.537 ms

Loss rate: 0.00%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-02-14 11:05:27

End at: 2018-02-14 11:05:57

Below is generated by plot.py at 2018-02-14 15:58:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 600.36 Mbit/s

95th percentile per-packet one-way delay: 165.253 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 326.24 Mbit/s

95th percentile per-packet one-way delay: 186.735 ms

Loss rate: 1.65%

-- Flow 2:

Average throughput: 319.79 Mbit/s

95th percentile per-packet one-way delay: 121.583 ms

Loss rate: 0.02%

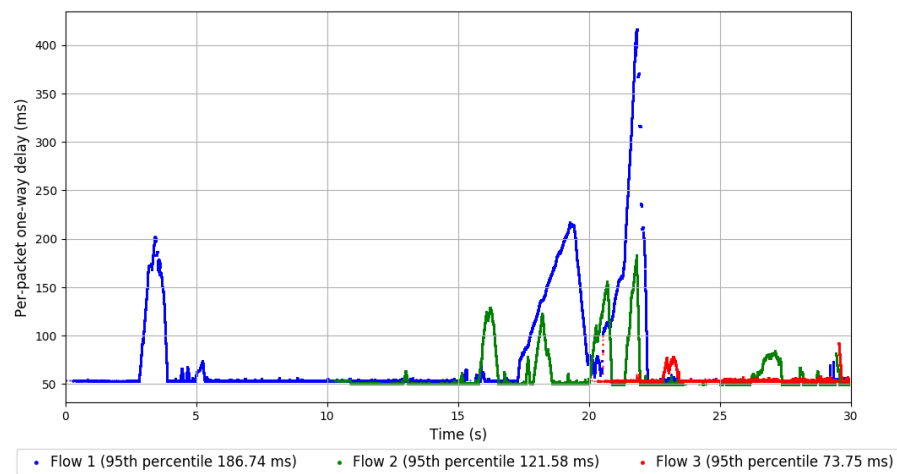
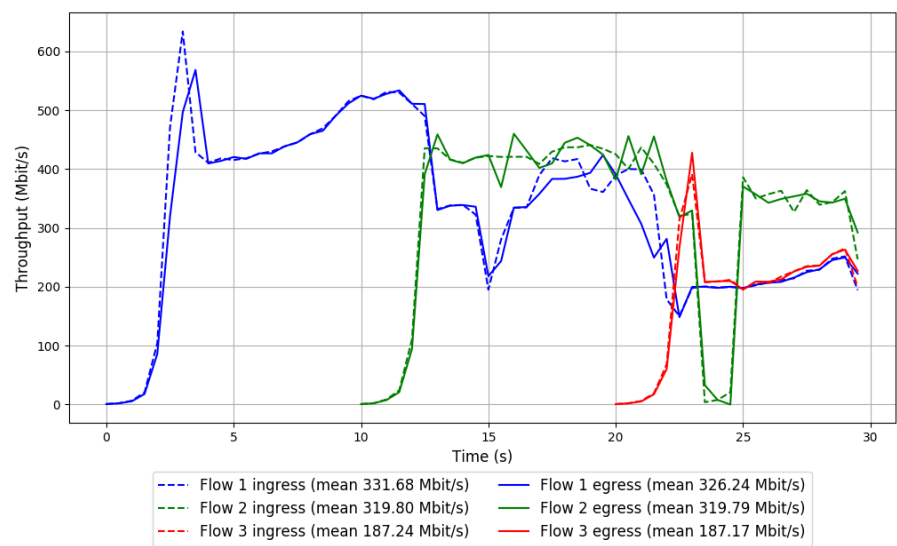
-- Flow 3:

Average throughput: 187.17 Mbit/s

95th percentile per-packet one-way delay: 73.752 ms

Loss rate: 0.05%

Run 10: Report of Vivace-loss — Data Link

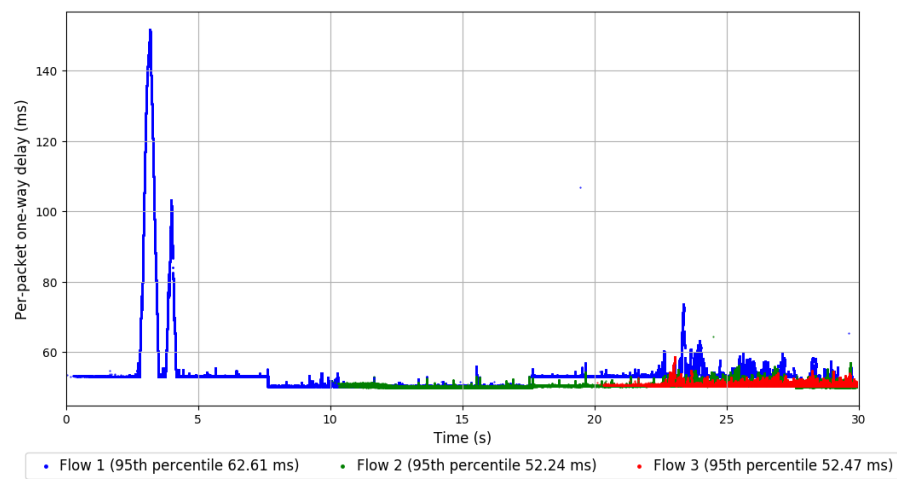
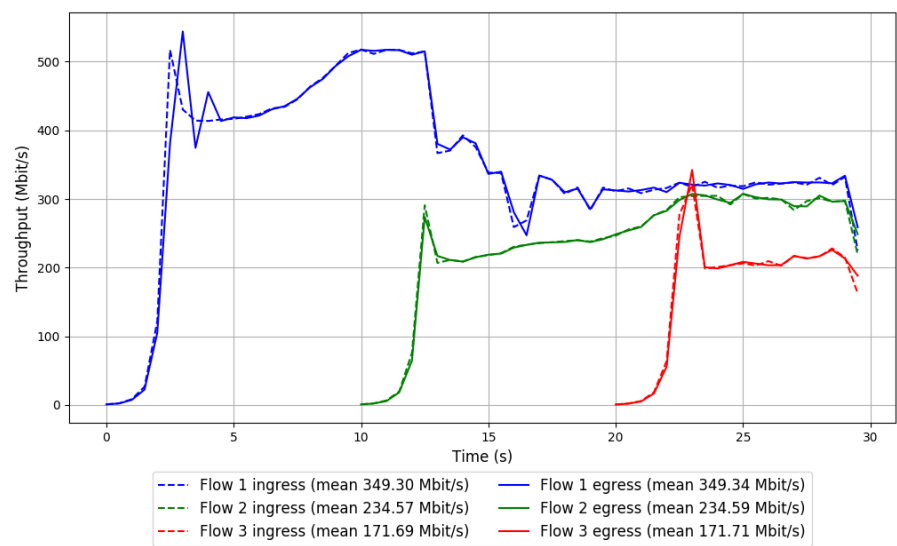


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-14 08:39:10
End at: 2018-02-14 08:39:40

# Below is generated by plot.py at 2018-02-14 16:01:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 561.55 Mbit/s
95th percentile per-packet one-way delay: 56.213 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 349.34 Mbit/s
95th percentile per-packet one-way delay: 62.612 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 234.59 Mbit/s
95th percentile per-packet one-way delay: 52.241 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 171.71 Mbit/s
95th percentile per-packet one-way delay: 52.472 ms
Loss rate: 0.00%
```


Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-02-14 08:56:34

End at: 2018-02-14 08:57:04

Below is generated by plot.py at 2018-02-14 16:01:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 576.67 Mbit/s

95th percentile per-packet one-way delay: 62.661 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 314.11 Mbit/s

95th percentile per-packet one-way delay: 61.604 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 256.02 Mbit/s

95th percentile per-packet one-way delay: 60.822 ms

Loss rate: 0.00%

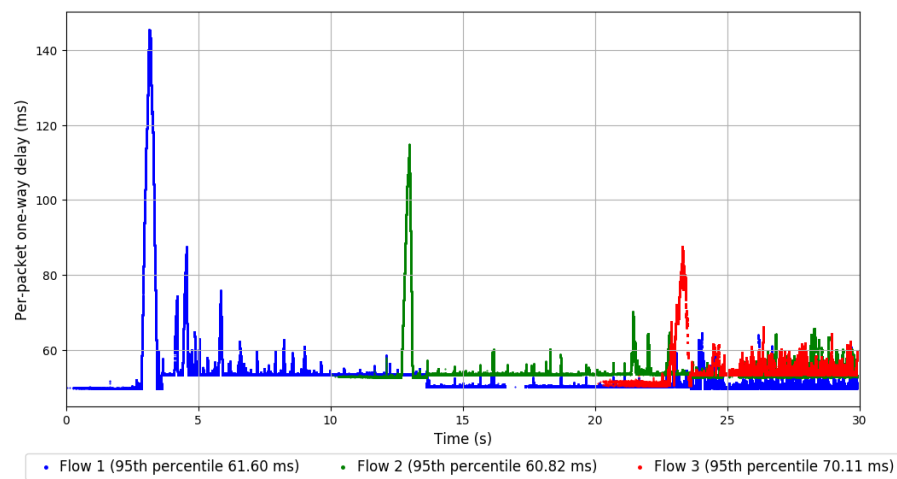
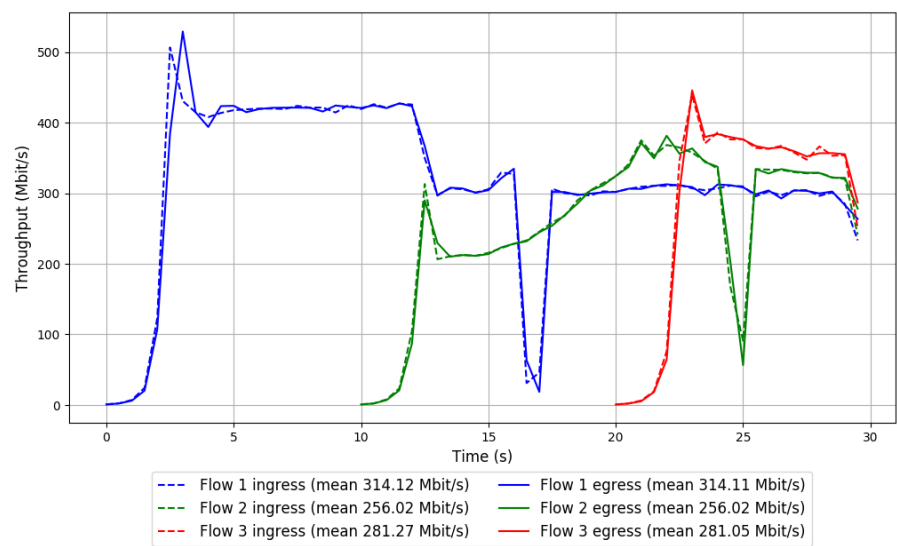
-- Flow 3:

Average throughput: 281.05 Mbit/s

95th percentile per-packet one-way delay: 70.109 ms

Loss rate: 0.05%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-02-14 09:14:01

End at: 2018-02-14 09:14:31

Below is generated by plot.py at 2018-02-14 16:04:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 624.27 Mbit/s

95th percentile per-packet one-way delay: 90.012 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 353.99 Mbit/s

95th percentile per-packet one-way delay: 62.296 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 316.22 Mbit/s

95th percentile per-packet one-way delay: 97.266 ms

Loss rate: 0.02%

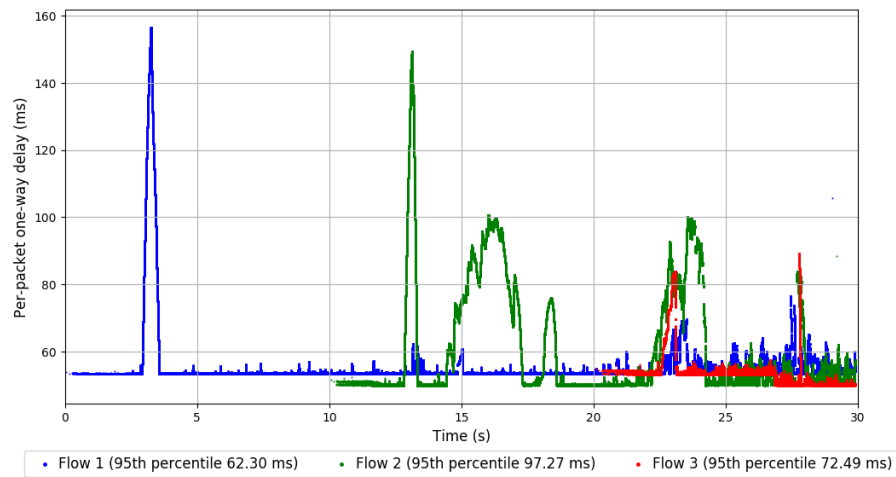
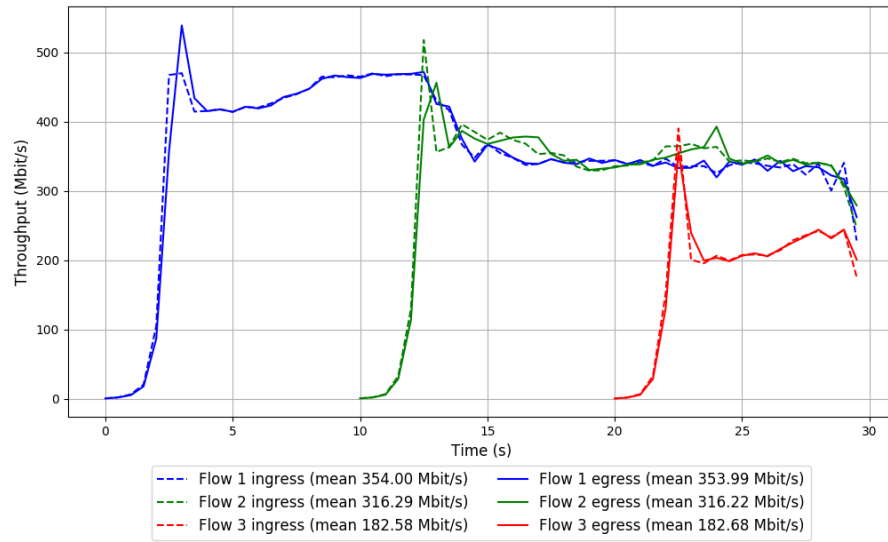
-- Flow 3:

Average throughput: 182.68 Mbit/s

95th percentile per-packet one-way delay: 72.493 ms

Loss rate: 0.00%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-02-14 09:31:44

End at: 2018-02-14 09:32:14

Below is generated by plot.py at 2018-02-14 16:05:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 621.11 Mbit/s

95th percentile per-packet one-way delay: 62.712 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 352.73 Mbit/s

95th percentile per-packet one-way delay: 53.703 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 261.93 Mbit/s

95th percentile per-packet one-way delay: 58.338 ms

Loss rate: 0.01%

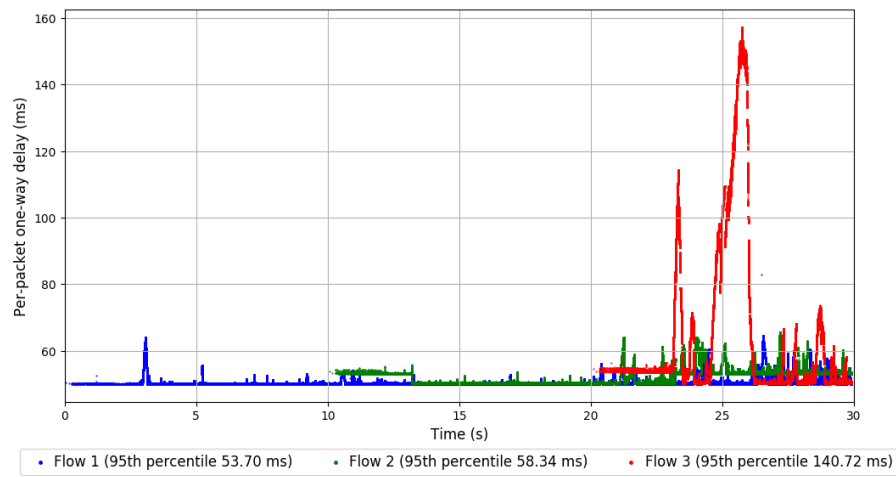
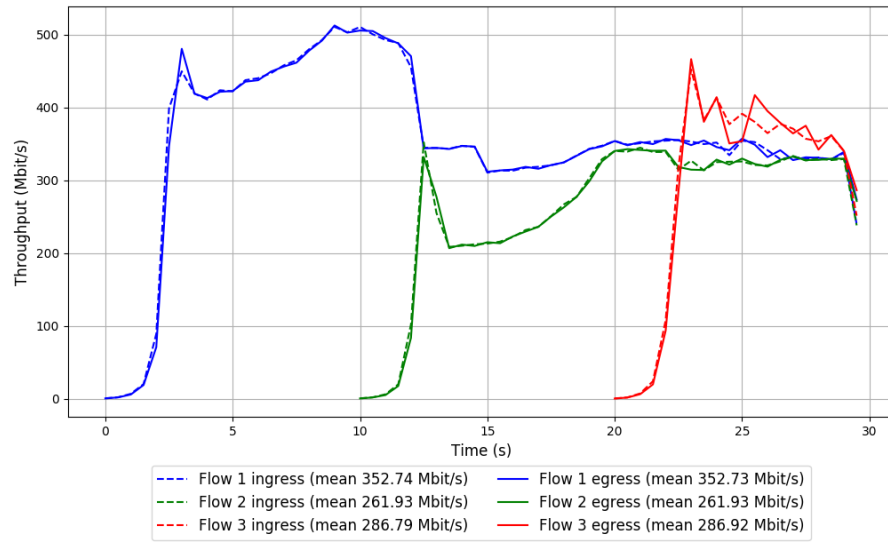
-- Flow 3:

Average throughput: 286.92 Mbit/s

95th percentile per-packet one-way delay: 140.718 ms

Loss rate: 0.00%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-02-14 09:48:54

End at: 2018-02-14 09:49:24

Below is generated by plot.py at 2018-02-14 16:05:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 680.65 Mbit/s

95th percentile per-packet one-way delay: 123.041 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 388.94 Mbit/s

95th percentile per-packet one-way delay: 96.308 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 293.46 Mbit/s

95th percentile per-packet one-way delay: 61.608 ms

Loss rate: 0.02%

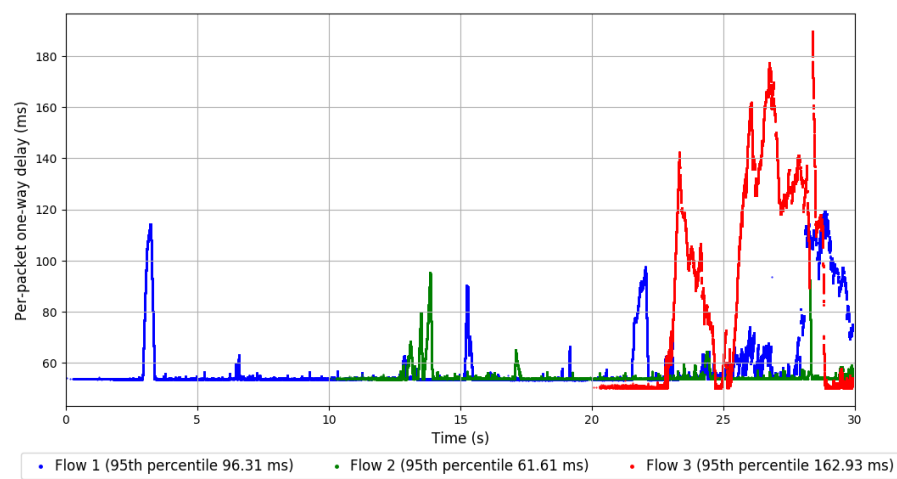
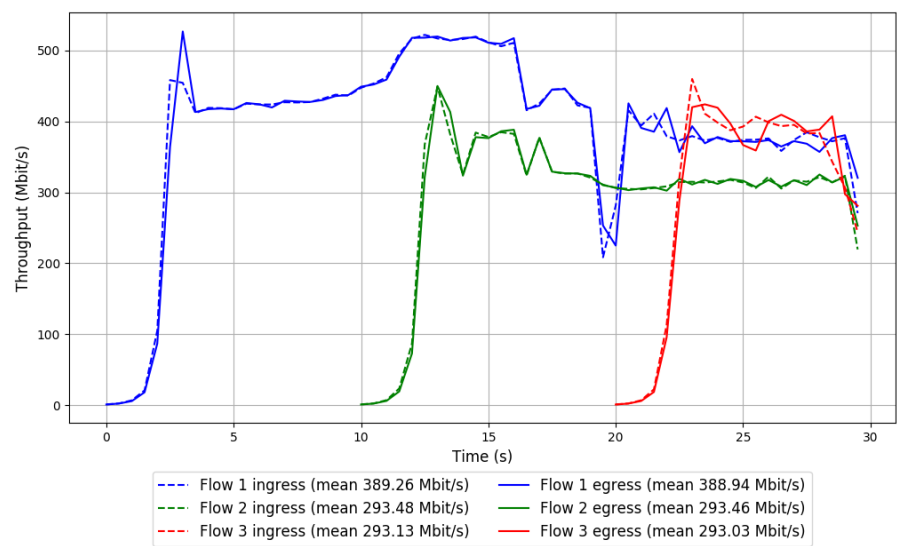
-- Flow 3:

Average throughput: 293.03 Mbit/s

95th percentile per-packet one-way delay: 162.930 ms

Loss rate: 0.03%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-02-14 10:06:49

End at: 2018-02-14 10:07:19

Below is generated by plot.py at 2018-02-14 16:05:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 610.50 Mbit/s

95th percentile per-packet one-way delay: 59.945 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 350.07 Mbit/s

95th percentile per-packet one-way delay: 52.995 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 304.15 Mbit/s

95th percentile per-packet one-way delay: 81.211 ms

Loss rate: 0.08%

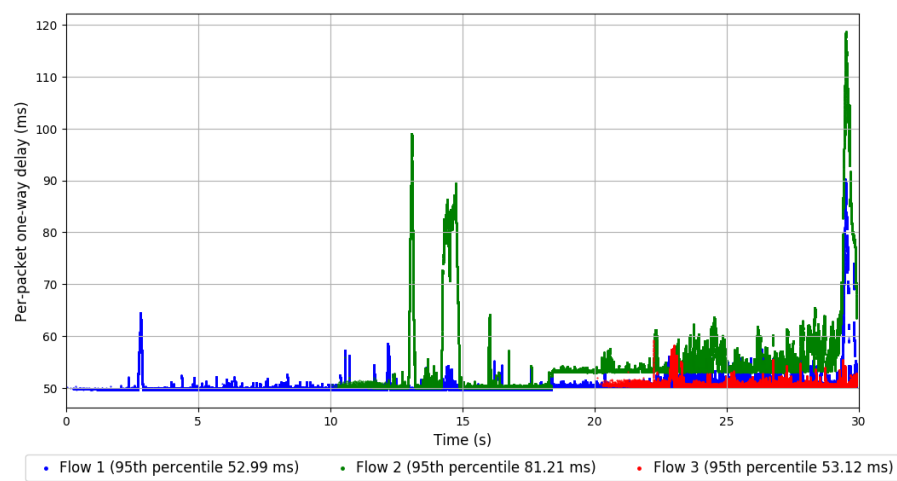
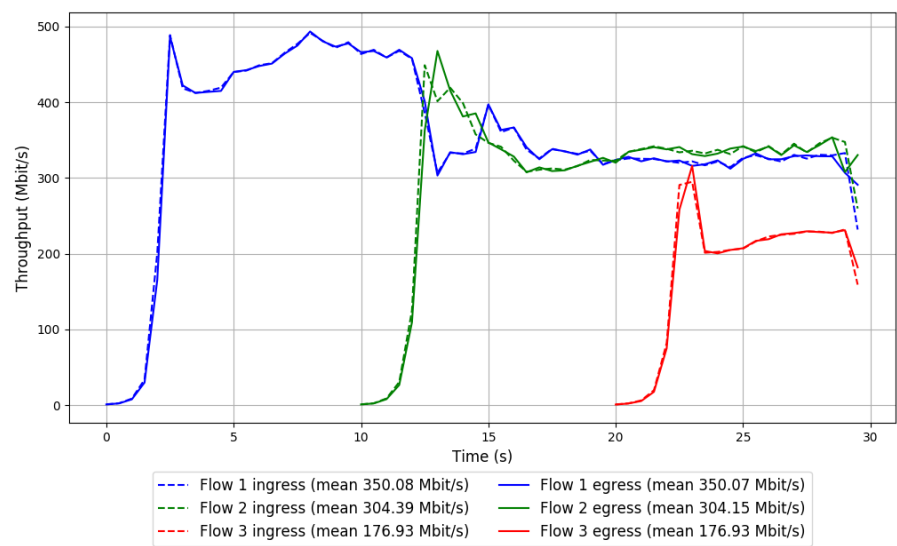
-- Flow 3:

Average throughput: 176.93 Mbit/s

95th percentile per-packet one-way delay: 53.120 ms

Loss rate: 0.00%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-02-14 10:24:19

End at: 2018-02-14 10:24:49

Below is generated by plot.py at 2018-02-14 16:06:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 609.52 Mbit/s

95th percentile per-packet one-way delay: 108.888 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 367.36 Mbit/s

95th percentile per-packet one-way delay: 141.646 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 279.85 Mbit/s

95th percentile per-packet one-way delay: 63.901 ms

Loss rate: 0.22%

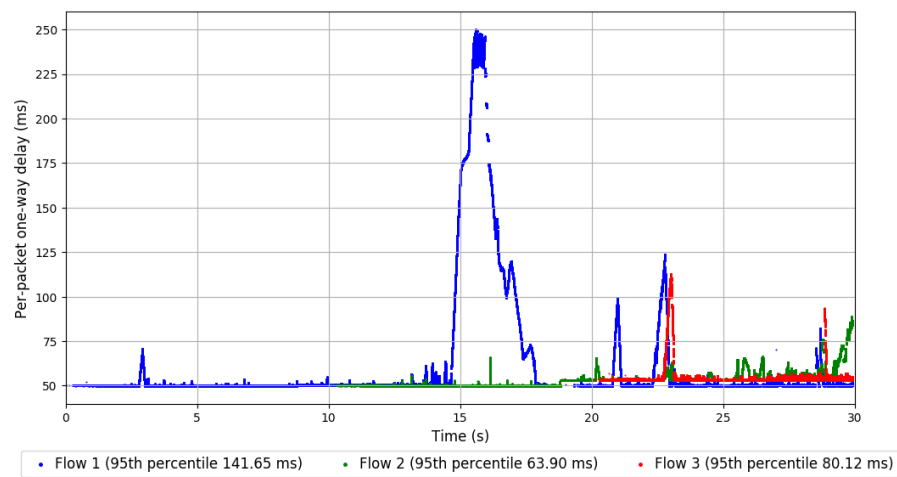
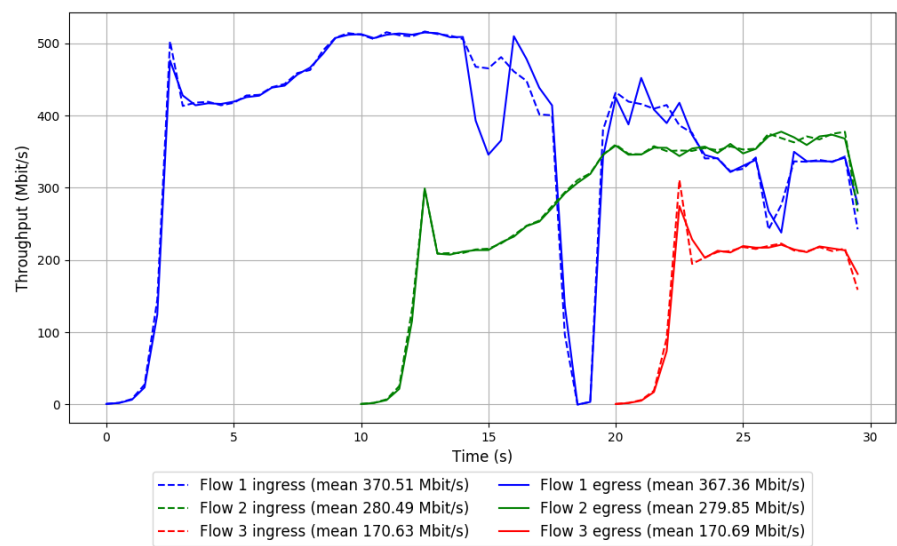
-- Flow 3:

Average throughput: 170.69 Mbit/s

95th percentile per-packet one-way delay: 80.117 ms

Loss rate: 0.01%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-02-14 10:41:58

End at: 2018-02-14 10:42:28

Below is generated by plot.py at 2018-02-14 16:06:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 601.25 Mbit/s

95th percentile per-packet one-way delay: 93.560 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 343.98 Mbit/s

95th percentile per-packet one-way delay: 67.644 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 299.04 Mbit/s

95th percentile per-packet one-way delay: 157.646 ms

Loss rate: 0.03%

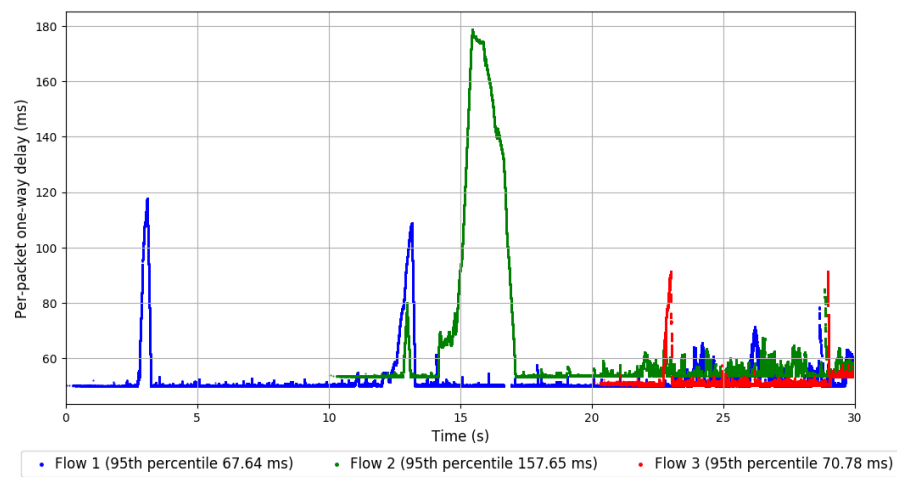
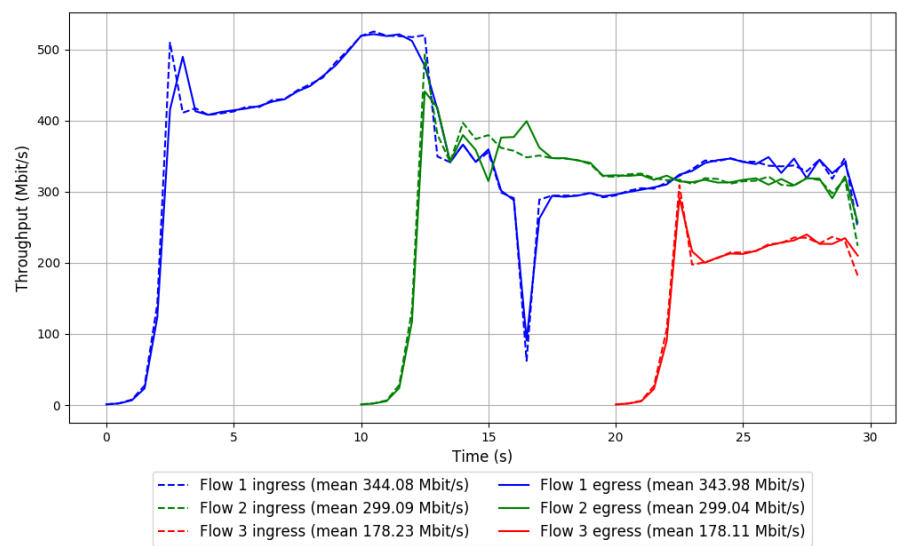
-- Flow 3:

Average throughput: 178.11 Mbit/s

95th percentile per-packet one-way delay: 70.779 ms

Loss rate: 0.03%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-02-14 10:59:32

End at: 2018-02-14 11:00:02

Below is generated by plot.py at 2018-02-14 16:07:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 627.37 Mbit/s

95th percentile per-packet one-way delay: 155.626 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 376.82 Mbit/s

95th percentile per-packet one-way delay: 177.272 ms

Loss rate: 0.95%

-- Flow 2:

Average throughput: 288.64 Mbit/s

95th percentile per-packet one-way delay: 58.309 ms

Loss rate: 0.00%

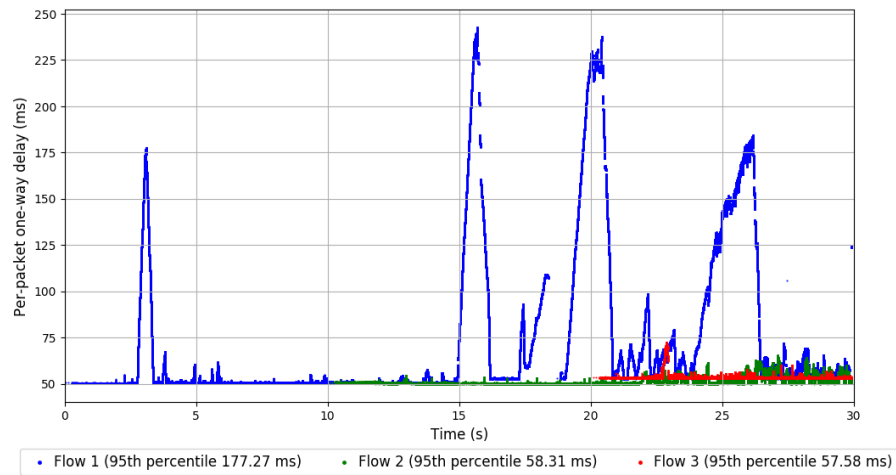
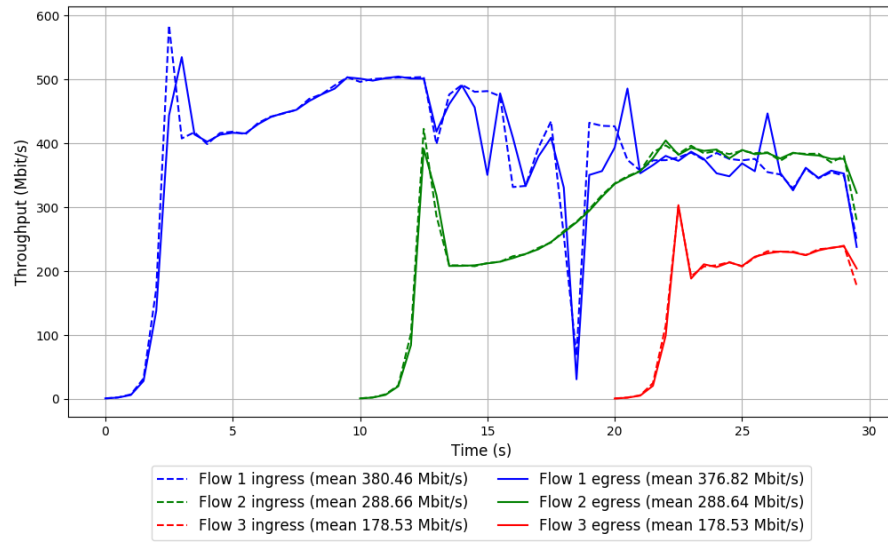
-- Flow 3:

Average throughput: 178.53 Mbit/s

95th percentile per-packet one-way delay: 57.584 ms

Loss rate: 0.00%

Run 9: Report of Vivace-LTE — Data Link



```
Run 10: Statistics of Vivace-LTE

Start at: 2018-02-14 11:16:59
End at: 2018-02-14 11:17:29

# Below is generated by plot.py at 2018-02-14 16:07:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 576.14 Mbit/s
95th percentile per-packet one-way delay: 219.856 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 339.01 Mbit/s
95th percentile per-packet one-way delay: 53.948 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 270.01 Mbit/s
95th percentile per-packet one-way delay: 236.807 ms
Loss rate: 1.67%
-- Flow 3:
Average throughput: 175.17 Mbit/s
95th percentile per-packet one-way delay: 64.815 ms
Loss rate: 0.00%
```

Run 10: Report of Vivace-LTE — Data Link

